ONTARIO HYDRO
LET'S GIVE TOMORROW A HAND

92-04682/

[redacted] serves the people of Ontario by supplying reliable electricity services at a competitive price. It provides consumers with information and programs on the wise use of energy and offers customers financial incentives to invest in energy efficient technology. Ontario Hydro has assets of more than $43 billion, making it one of the largest public utilities in North America. The Corporation employs more than 28,000 regular and approximately 6,000 part-time and temporary staff.

Created in 1906 by special provincial statute, Ontario Hydro operates under the Power Corporation Act to deliver electricity throughout Ontario. It also produces and sells steam and hot water as primary products. It regulates Ontario's municipal utilities and, in co-operation with the Canadian Standards Association, is responsible for the inspection and approval of electrical equipment and wiring throughout the province.

Ontario Hydro operates 81 hydroelectric, nuclear and fossil-fuelled generating stations as well as a transmission system that distributes power to customers across the province.

The Corporation supplies electricity directly to about 925,000 rural retail customers. It also sells power to 311 municipal utilities serving 2.8 million Ontario customers, and provides electricity directly to almost 110 large industrial customers with load requirements in excess of five megawatts.

Ontario Hydro is a financially self-sustaining corporation without share capital. Bonds and notes issued by Hydro are guaranteed by the Province of Ontario. The Corporation is governed by a Board of Directors, consisting of up to 17 members. Sixteen members, including the Chair, are appointed by the Lieutenant-Governor-in-Council. The President is appointed by the Board. There are eight board committees: Finance, Audit, Management Resources, Social Responsibility, Technical Advisory, Pension and Insurance Fund Investment, Environment, and Aboriginal and Northern Affairs.

Ontario Hydro's head office is located at 700 University Avenue, Toronto, Ontario M5G 1X6. For more information or additional copies of this report please call our toll-free customer service number: 1-800-263-9000.

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ONTARIO HYDRO BOARD OF DIRECTORS' REPORT FOR 1991

To the Honourable Brian Charlton, Minister of Energy

On behalf of the Board of Directors, I am pleased to submit to you Ontario Hydro's report on the financial position of the Corporation, as well as a discussion of issues and initiatives for 1991 and beyond.

We thank you and the Ministry of Energy staff for the co-operation extended over the year.

M. Eliesen

Marc Eliesen
Chair of the Board of Directors
April, 1992

MESSAGE FROM MARC ELIESEN AND ALAN HOLT

There's a new emphasis at Ontario Hydro.

While maintaining our traditional mandate to provide reliable, affordable energy, we are increasing our efforts to manage demand and ensure that our work enhances Ontario's natural, social and economic environment.

The utility business is changing worldwide. Society at large is telling utilities they cannot continue to operate in the future as they have in the past.

During 1991 Ontario Hydro's activities reflected a company in transition marked by changing customer needs, new social demands and global economic pressures.

Ontario's recession continued to take its toll on the economy. Recognizing the increased importance of reliable and affordable electricity during times of economic hardship, Ontario Hydro implemented several important operational and strategic initiatives to continue providing our customers with the energy service they need while Ontario's economy struggles to recover.

We faced some simultaneous difficulties. Our nuclear system still performed below expectations although performance improved over 1990. Technical problems prevented us from bringing Darlington nuclear Unit 1 into service as planned. And older parts of hydroelectric, fossil, nuclear and transmission systems underwent rehabilitation.

As of 1991, Ontario Hydro has committed about $4 billion to extend the lives of our fossil and hydroelectric stations and restore our nuclear performance. An additional $1.4 billion has been committed to upgrade our transmission system.

Although costly, these efforts are critical to restoring our system to full operating capability. They will ensure the continued reliability of our system, improve its performance and delay the need to build major new generating stations.

In September, Ontario Hydro's management structure was reorganized to reflect our dual challenge of ensuring energy supply and reducing energy demand.

Hydro's policy, planning and strategic efforts were pulled together under the Chair's direction. These include the branches responsible for energy management, the environment, finance and human resources. All operating functions were united to report directly to the President. And two new Hydro Board Committees were formed to help guide our environmental activities and promote a better understanding of Aboriginal and northern affairs.

These organizational initiatives were made with a renewed spirit of partnership with our customers and the public who now demand Hydro projects provide tangible benefits beyond the undeniable advantages of a reasonably-priced, secure supply of electricity.

The unfavourable economic and operating conditions of 1991 affected Hydro's overall financial performance although net income improved over 1990. To maintain our financial health and offset rising operating costs, as well as the cost of bringing Darlington into service, we announced an 11.8 per cent rate increase for 1992—an increase we know our customers find particularly difficult in today's economy.

This is not the first double-digit rate increase in Hydro's history—in the mid-1970s rates rose consecutively by 13 per cent, 22 per cent and 30 per cent as significant blocks of new facilities went into service. We will continue to do our best to lessen the impact of future rate increases by improving our productivity, helping our customers reduce future energy bills, and cutting our costs.

In 1991 we intensified our efforts to help our customers save on their energy bills through demand management. By definition, managing demand—either by conserving electricity and/or using it more efficiently—requires a partnership. Hydro can develop and provide energy conservation and efficiency programs but only our customers, through their participation, can implement them successfully.

Electricity consumers slowed the growth of electricity demand in 1991 and saved an estimated 250 megawatts of power and over $28 million in their annual energy bills. This success has been incorporated into our updated Demand/Supply Plan, which we revised in December. The new plan sets more aggressive energy conservation targets for the rest of the 1990s. We predict our customers can save 5,200 megawatts by the year 2000.

Our updated 25-year Demand/Supply Plan now defers major capital additions by at least seven years, which will also result in considerable capital savings. We will need to borrow $9 billion less than originally projected between now and the year 2011.

To cut costs further, we cancelled our expensive uranium contracts with Rio Algom Ltd. and Denison Mines in Elliot Lake. This alone will save electricity consumers approximately $1.2 billion over the next 10 years. The price of other major fuel, such as western Canadian coal, is expected to be significantly reduced in the coming years as well.

Internally, we reduced administrative and support budgets, and froze senior management's 1992 salaries at the 1991 level.

Hydro staff also continue to monitor their own processes in an effort to cut costs and improve productivity.

In the past few years Ontario Hydro's labour and management staff have worked together to develop an increasing number of quality improvement programs which have already resulted in more effective teamwork, better quality control and increased efficiency. The retubing of Pickering Unit 4 for instance is scheduled to take only 19 months, compared to the 54 months required to retube Unit 2.

Such improvement indicates more than Hydro's commitment to working more efficiently. It also reflects the new management and labour relations at Ontario Hydro. Our relationship with our two major bargaining groups, the Ontario Hydro Employees Union (CUPE Local 1000), and the Society of Ontario Hydro Professional and Administrative Employees is significantly better as a result of taking a fresh new approach to negotiations which emphasizes co-operation rather than confrontation. Hydro employees are working with a greater sense of partnership amongst themselves as we move toward the same goal—a truly customer-oriented energy company.

We would like to thank all those who help Ontario Hydro meet the province's energy needs—Hydro employees for their continuing contribution, the Ontario Hydro Board of Directors for their guidance, and the Ontario municipal electric utilities, and their representative organization, for their co-operation and support in serving the electricity consumers of Ontario. Finally we extend a special thanks to Robert Franklin whose vision and leadership during the past five years helped Ontario Hydro become more like the energy service company our customers expect.

Marc Eliesen
Chair

Alan Holt
President

PARTNERSHIP

Reliable, affordable electricity at the flick of a switch. For generations, Ontarians have counted on a reliable source of power for their homes and businesses. And for generations, Ontario Hydro has provided customers with a stable, reasonably-priced supply of electricity.

We're determined to continue this tradition. We're seizing opportunities to build strong, dynamic relationships with all our customers so we can continue to use energy more wisely.

We're encouraging our customers to learn more about how Ontario Hydro can help them manage their energy needs more effectively. We're committed to improving the options we offer so that all of our customers—residential, commercial, agricultural and industrial—receive the best possible service.

Through our energy management programs, more and more consumers are learning to use electricity differently and more wisely. Customers are becoming "power savers." And whether that means a lower energy bill, less waste or a better living environment, the end result is the same. Saving energy is an investment in Ontario's future.

We're also working hard to forge strong, lasting relationships with Ontario's municipal utilities that serve many of our end-use consumers in Ontario's communities.

Ontario Hydro and our municipal utility partners across the province are striving to deliver the demand management message to customers so that everybody can get involved. And municipal utilities are passing that message on to their customers.

Together, we're helping homeowners throughout Ontario to use energy more efficiently and lower the cost of their monthly bills. From using energy efficient lighting and showerheads to installing improved insulation, residential customers can save power and live more comfortably at the same time.

Hydro is also helping our industrial and commercial customers. By switching to energy efficient lighting, high efficiency motors and taking advantage of Hydro's Power Saver energy audits and load shifting programs, companies are significantly lowering production costs and staying competitive.

OPPORTUNITY

INNOVATION

CO-OPERATION

INITIATIVE

OPPORTUNITY

Last June, the town of Espanola, a community of 6,000 people, 72 kilometres west of Sudbury, became the first in Canada to implement a comprehensive program to reduce energy consumption in every home and business. The Espanola Power Savers Project is a radical approach to conservation designed to evaluate the potential for widespread participation through partnership with the community.

Led by Program Manager Vicky Sharpe, this 18-month project aims to reduce Espanola's total electricity consumption by 20 percent. Through a combination of intensified community-based marketing, high financial incentives to customers, and direct installation of comprehensive measures in the town's 2,300 homes and businesses, Espanola will become Canada's most energy efficient community.

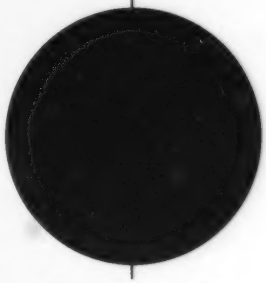
This "fast track" approach to conservation is one of the ways Ontario Hydro is attempting to meet our ambitious goals for electricity savings over the next decade. The concept is based on the premise that effective demand management requires a change in consumers' attitudes and behaviour towards electricity use. Such a fundamental change can only be achieved through increasing awareness of the potential of conservation and changing the way consumers make decisions about energy use. The Espanola Power Savers Project is designed to accelerate this process.

Partnership with the municipal utility, the town council, and individual residents is the key to success for the Espanola Power Savers Project, and for all community-based conservation. Solid community involvement and support for the project means that the conservation ethic remains in the town after the project's completion, as do the skills and knowledge gained.

For home and business owners, becoming a power saver begins with a comprehensive energy audit to recommend energy efficient measures, ranging from block heater timers to upgraded insulation, windows, and doors. On average, up to 80 percent of the costs of installing electrical energy saving measures are being covered by Ontario Hydro.

By project end, it is anticipated that almost every home and business will have been audited and had some conservation measures installed. With the energy saved, everyone in Espanola will benefit. Customers will pay less for electricity by reducing their consumption, and Espanola Hydro will be able to provide power to an additional 400 – 500 homes without any new capital investment.

The efforts in Espanola are on the leading edge of demand management in North America, and the results of the research will have major implications for the way we might involve the people of Ontario in energy conservation in the future.



Ontario Hydro Espanola Program Manager, Vicky Sharpe

Espanola, a town of 6,000, became the first Power Savers community in Canada

A block heater timer can reduce heater usage by six hours and save up to 60 per cent of energy used

INNOVATION

For Ontario Hydro's large industrial customers, growing energy costs can affect their companies' efforts to be competitive in today's global markets.

A division of Ivaco Inc., Ivaco Rolling Mills is one of eastern Ontario's heaviest power consumers. A steel plant and rolling mill complex, located in L'Orignal, eastern Ontario, the company supplies North American and key off-shore markets with a wide range of products made from metallurgically clean, ductile steel. Its two electric arc furnaces convert scrap metal into molten steel at 1,650 degrees Celsius. The company is a leader in the development of new energy-efficient technologies that will lower production costs and increase profitability.

Part of that leadership involves working with Ontario Hydro to monitor plant activities and identify opportunities for more efficient energy use and greater savings. For Ontario Hydro's Ralph Sheldrick, that means looking at different operations and recommending efficiency adjustments which will result in lower demand. These include the conversion to energy efficient lighting and installation of high efficiency motors which use less energy to do the same amount of work.

To take advantage of Hydro's time-of-use rates, where electricity is priced more cheaply when demand is lower during off-peak hours, Ivaco Rolling Mills installed a custom-configured smart computer demand management system to monitor, forecast and control total electrical consumption of the entire complex. As a result, the company's power needs decreased by almost 10 megawatts over two years, while productivity increased eight per cent.

Using advanced technology to measure demand, identify trends in energy usage and patterns of consumption, the system allows for the expansion of energy consuming processes while reducing peak power demand. This is accomplished by suspending one furnace from operation to control the level of demand while minimizing the impact on production.

By working with Ontario Hydro, Ivaco Rolling Mills' investment in energy-efficient technology pays off in reduced costs. By using the load shifting program, the company can transfer a greater proportion of its energy demand to off-peak periods. This will result in lower energy costs and a more competitive presence in the international marketplace.

Ontario Hydro Customer Energy Services' Ralph Sheldrick

Ivaco wire rods rolled from heated steel billets

Ivaco's electric arc furnace heats scrap metal to molten steel prior to casting

TOM WONG

CO-OPERATION

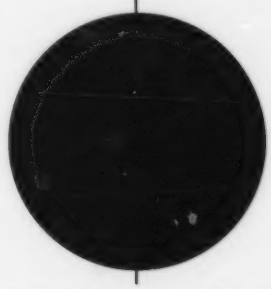
As part of its commitment to help customers in Ontario's communities save energy, Ontario Hydro is working with the Moose Factory First Nation to construct 14 energy-efficient R-2000 homes in the local community. Located in the James Bay area, where temperatures drop as low as minus 50 degrees Celsius, the Moose Factory project is one of the largest R-2000 programs in Ontario's far north.

The R-2000 project was jointly developed by Moose Factory First Nation's Housing Director Wilbert Cheechoo, Moose Band Development Corporation's Dave Faries and Ontario Hydro's Andre Bisson. The energy-efficient R-2000 homes will provide a comfortable living environment for the new home owners, and will result in lower energy consumption and lower electricity bills. The homes will be built by Moose Band Development Corporation building trades employees trained in R-2000 construction techniques by the R-2000 arm of the Ontario Home Builders Association.

The R-2000 concept sets a new standard for home energy efficiency. R-2000 homes are better built homes with increased insulation and greater air sealing, and have a mechanically controlled ventilation system. Every house has a continuous air vapour barrier installed in its shell which reduces leaks to a minimum. With less drafts and air leaks than a conventional home, an R-2000 home is comfortable and more economical to run.

R-2000 homes also have superior air quality because of the Heat Recovery Ventilator units that remove odours, smoke and other pollutants and provide a controlled supply of fresh air. The unit works continuously to expel stale air from living areas, such as the kitchen, bathrooms and laundry room, and replace it with fresh air from outdoors. The controlled air exchange not only creates a living environment that's fresh but it also maintains the desirable level of humidity in the house to reduce condensation on the windows.

Through programs like the Moose Factory R-2000 project, Ontario Hydro is working with the Province's First Nations and other Aboriginal communities to promote energy efficiency to customers as well as helping to provide better quality housing for residents in Ontario's communities.



Ontario Hydro Customer Energy Services' Andre Bisson

Moose Band Development Corporation Housing Director Wilbert Cheechoo

Moose Band Development Corporation Executive Director Dave Faries

INITIATIVE

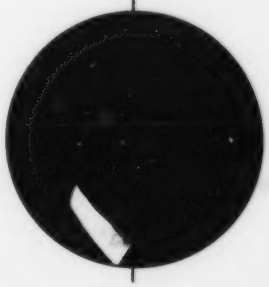
People in Ontario today want to have a say in what's taking place around them. As Ontario Hydro continues to upgrade our generating stations and transmission systems to improve our service to customers, we must remain sensitive to the impact our operations will have on local communities.

New projects are everybody's concern, and it's important that individuals and interested groups have the opportunity to share their ideas and points of view in the planning process. Since 1975, Ontario Hydro's public participation programs have encouraged potentially affected citizens and interested organizations to participate in the planning of new or upgraded facilities. Through these programs they can assess a proposed project's merits and drawbacks, raise their concerns about issues which affect them and provide additional information and insight. Hydro also provides opportunities for public involvement in the development of corporate plans and policies.

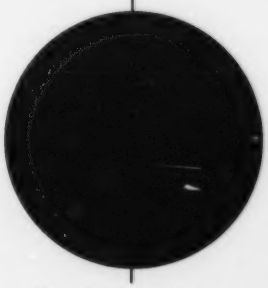
Last year, Ontario Hydro selected the Merrickville hydroelectric generating station in the village of Merrickville, 45 kilometres south of Ottawa, as the first to be assessed under the Small Hydraulic Assessment and Retrofit Program (SHARP). The program was established in 1988 to renew 33 of the smallest and oldest hydroelectric generating stations in the province. Planning for the modification of Merrickville—Ontario's smallest station—involved early consultation with the community.

For Project Engineer Mike Markovich, this entailed the involvement of local groups to review Hydro's proposal. Along with Hydro, Heritage Merrickville Foundation President Dr. Robert Nicholls, Merrickville and District Historical Society Treasurer Harold Gilmer and the Chair of the Local Architectural Conservation Advisory Committee, Phyllis Walker, participated throughout the planning process to ensure that the proposed station modification reflected the needs of the village.

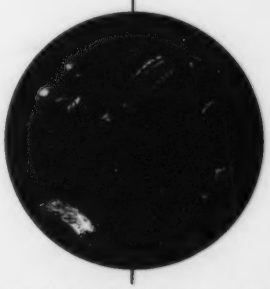
The Merrickville station, which was built between 1914 and 1919 and sold to Hydro in 1950, may be retrofitted to replace the existing generating units. This will extend the station's life by about 80 years and double generating capacity to 1.8 megawatts. When completed, the improved facility will help meet Ontario's future energy needs without adversely affecting the local environment.



Ontario Hydro Project Engineer Mike Markovich



Merrickville Hydroelectric Generating Station



Ontario Hydro's Keith Eastman discusses project proposal with Dr. Robert Nicholls, Harold Gilmer and Phyllis Walker

During 1991, Ontario Hydro made gains on several fronts, including customer energy efficiency, the environment, worker safety, and Aboriginal relations.

Electricity demand increased only marginally during 1991, reflecting the continuing recession in Ontario. Ontario Hydro supplied a total of 139.1 million megawatt-hours in 1991 including purchased power from non-utility generation in Ontario and neighbouring utilities. This is a 1.3 per cent increase over the 1990 supply of 137.3 million megawatt-hours.

Hydro's 1991 net income improved over 1990, but financial performance fell short of expectations. Although the 8.6 per cent increase in electricity rates in 1991 helped improve total revenues, total operating costs and capital expenditures were also higher.

In September, an 11.8 per cent increase in electricity rates was approved for 1992. The increase is largely the result of nuclear costs, primarily those associated with the Darlington generating station, and rehabilitation expenditures to maintain and replace aging transmission and generation facilities.

In April, the Environmental Assessment Board began its public hearings to review Hydro's 25-year Demand/Supply Plan, first published in 1989. In December, Hydro updated the Plan. The "Plan Update," released in January 1992, defers the need for new major supply as a result of revised longer-term demand forecasts due to slower economic growth, life extensions of existing fossil-fuelled plants, reduced short-term demand, and successful demand management initiatives.

The "Plan Update" continues to focus on helping customers manage their energy bills and use electricity more efficiently, getting the maximum output from the existing system by rehabilitating aging facilities, encouraging non-utility generation as required and further developing Ontario's hydroelectric potential.

Rehabilitation of aging generating stations and transmission facilities across Ontario continued in 1991 to ensure Hydro's system remains efficient, sensitive to the environment and continues to provide customers with a reliable source of electricity.

Energy Management

In 1991, Ontario Hydro invested almost $179 million in our conservation and energy efficiency efforts. Of that, almost $50 million was paid directly to electricity consumers, to help customers adopt electrically-efficient products, practices, equipment and technologies.

Customer energy services advisors and energy management representatives worked with consumers across Ontario to save an estimated 250 megawatts of power and over $28 million in 1991 customer bill savings. That's enough electricity to meet the daily power needs of a city the size of St. Catharines.

By working with its industrial customers, Ontario Hydro is encouraging effective energy management and helping industry to become more competitive. In 1991, Hydro formed an energy management partnership with Canadian Pacific Forest Products in Thunder Bay. By using Hydro's load shifting program, which shifts some electricity use to off-peak hours, Canadian Pacific Forest Products should save approximately $7 million in energy costs annually.

Hydro is helping our agricultural customers by promoting energy efficiency on Ontario's farms. Information, programs and incentives can help lower energy consumption and reduce operating costs on electrically intensive dairy, hog and poultry farms.

Hydro also continued its four-year Street Smart Streetlighting conversion program for Ontario communities, begun in 1990. By the end of 1991, 200 communities had completed or started converting to efficient street lights through Ontario Hydro's program. This covers conversion of over 40 per cent of inefficient streetlighting in Ontario. The City of Kitchener received a $600,000 incentive from Hydro in December to install energy-efficient streetlights. The conversion will save the city over $300,000 in annual electricity costs and create enough energy savings to power about 400 homes.

Programs for residential customers included the distribution of light bulbs to 3.1 million Ontario households. Each household received two energy-saving, 52-watt incandescent light bulbs to replace the widely-used 60-watt bulbs. By switching to energy-saving light bulbs, customers can help reduce growth in electricity demand by up to 30 megawatts by the year 2000.

The success of Hydro's various demand management programs to date has increased the Corporation's longer-term targets to saving 9,860 megawatts by 2014, compared to 5,570 megawatts estimated in the 1989 Demand/Supply Plan. The increase not only reflects anticipated program benefits but also the introduction of higher efficiency standards in buildings and electrical equipment, and opportunities to promote alternative fuels in place of electricity, when economic.

With the help of Hydro's Street-Smart Streetlighting conversion program, communities across Ontario were able to install energy-efficient streetlighting that will reduce their electricity costs and help them save energy.

Alternative Energy Sources

Hydro supported various alternative energy projects in 1991. Among them, the Hugh MacMillan Photovoltaic Project is a solar electric installation under construction at Sunnybrook Hospital's Hugh MacMillan Rehabilitation Centre in North York. Jointly funded by Ontario Hydro, the Ontario Ministry of Energy and Energy, Mines and Resources Canada, it should contribute 100 kilowatts toward the hospital's power needs and help evaluate emerging solar energy technologies.

Supporting the development of alternative energy helps Hydro invest in Ontario's future. Emerging solar energy technologies, using photovoltaic panels to harness the sun's energy, will provide new sources of power to meet our requirements in the years ahead.

Environmental Initiatives

As part of Hydro's commitment to the environment, the Board of Directors established an Environment Committee to ensure the Corporation's environmental activities reflect the interests of the people of Ontario.

Hydro also developed new "Standards and Targets for Paper." With purchases of 1,000 tonnes of paper and paper products a year, Hydro now has a policy that all publications are to be produced on recycled paper. Other standards promote paper recycling and double-sided photocopying. These standards translate into a savings of 30,000 trees cut each year or 60 hectares of forest.

Phase I of the Municipal and Industrial Strategy for Abatement (MISA) to eliminate the discharge of toxic substances into water bodies was completed, in conjunction with

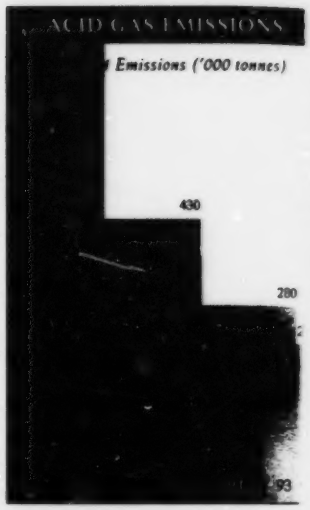
the Ministry of the Environment. Water samples were taken from Hydro's hydroelectric, fossil and nuclear generating stations for analysis. The results will be considered by the Ministry of the Environment in setting future pollution limits on all station effluents.

Ontario Hydro continued to reduce acid gas emissions from its fossil generating stations in 1991. Flue gas conditioning systems installed at Lambton and Nanticoke stations in 1990 were improved to allow them to burn low sulphur coal without affecting ash particle collection from existing stack gases. Acid gas emissions were 40 per cent lower than in 1989 before flue gas conditioning systems were installed and were 21 per cent below the regulatory limit. The reductions were due to the station improvements, reduced demand for electricity and increased nuclear generation.

The Corporation also received Ministry of the Environment approval to construct scrubbers at Lambton fossil generating station to remove sulphur dioxide from gases produced when coal is burned. In addition to further reducing acid gas emissions, the process leaves a gypsum by-product residue which can be sold as a construction material. Scrubbers for Lambton's first two units are expected to be in service in 1994.

At Nanticoke generating station, the conversion of the wet fly ash disposal system to a dry system, started in 1990, proceeded on schedule. The new system's superior environmental technology will allow Hydro to recycle greater amounts of coal ash into by-products for use in construction and cement manufacture.

Hydro is a member of the Great Lakes Regional Corporate Environmental Council (GLRCEC). GLRCEC is a unique association of U.S. and Canadian industries and environmental organizations. In 1991 Ontario Hydro participated in the development of a plan, and the release of a report, outlining actions that could be taken by consumers and corporations to save energy and reduce pollution.



● *Acid Gas Regulation Limits*

Zebra mussels are a growing problem for Hydro's Great Lakes and St. Lawrence generating stations. Research to develop non-chlorine based treatments to control the mollusc population continued in 1991.

Health and Safety

Ontario Hydro had one workplace fatality during the year, compared with six work-related deaths in 1990. Improving Hydro's safety record is vital and the Corporation is working hard to eliminate employee fatalities completely.

Greater safety in the workplace is a priority. In 1991, the Corporation worked with Hydro's labour organizations to improve health and safety awareness and conditions in the workplace.

Ontario Hydro, CUPE Local 1000 and the Society of Ontario Hydro Professional and Administrative Employees jointly developed a certification package to train safety committee members to halt any unsafe work practices in any Ontario Hydro workplace. Training courses, which exceed current legal certification requirements, will start in 1992.

Initiatives were also taken to promote public safety. Through our public safety program, Hydro worked with a number of outside groups to improve public health and safety. Multidisciplinary studies examining possible adverse effects of exposure to electric and magnetic fields from power lines are being co-ordinated through a network of public utilities, safety associations and universities.

Also, Hydro continues to work with police, fire departments and educational groups to increase awareness of accidents with electricity and other public safety issues.

Improving standards of health and safety in the workplace is everybody's business. Hydro is working with our employees and labour organizations to increase awareness and promote safe working practices.

New Business Ventures

In 1991, Ontario Hydro was awarded 76 new contracts to provide technology and expertise in over 25 countries worldwide, earning revenues of $49.9 million and a net income of $5.6 million. The new contracts involved almost $3 million of related business with Canadian consultants, manufacturers and suppliers in support of Canadian companies. Licenses for six technology products were granted to Ontario businesses in 1991.

Hydro also provided 80 per cent of the world supply of Cobalt 60, a radioactive isotope used in the treatment of cancer, sterilization of medical supplies and the processing of toxic wastes.

Aboriginal Relations

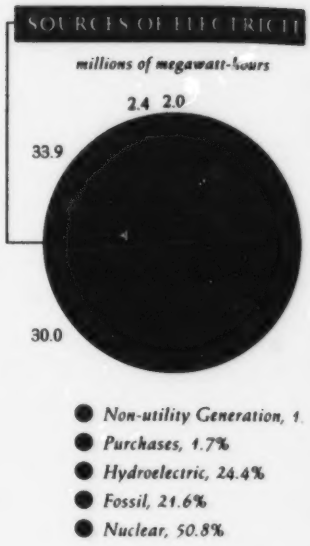
Ontario Hydro's Board of Directors placed increased emphasis on the Corporation's relationship with Ontario's Aboriginal communities with the formation of the Aboriginal and Northern Affairs Committee. The Committee will review Hydro's policies and programs as they relate to Aboriginal and northern peoples to ensure Hydro activities are in line with the best interests of these communities. In addition, a new Aboriginal and Northern Affairs branch was created to foster an atmosphere which allows Aboriginal and northern communities to participate in Hydro decisions which affect them.

Ontario Hydro is working with Ontario's Aboriginals to understand their needs, encourage greater communication and ensure that our decisions reflect their best interests.

In 1991, Ontario Hydro suspended planning for six new hydroelectric generating stations on the Moose and Abitibi rivers until a co-planning studies process related to Hydro developments in the region is endorsed by the affected Aboriginal groups.

Hydro expanded its electrical service network to 22 remote communities with the opening of the Kingfisher Lake diesel generating station 500 kilometres north of Thunder Bay. Hydro staff also conducted electrical safety and energy management programs throughout the region's First Nations communities.

Ontario Hydro arranged for Aboriginal communities affected by the Ontario-Manitoba Interconnection project and the 500 kilovolt transmission system expansion north of Sudbury to participate in environmental assessment studies of these proposals. Agreements to do this were negotiated with the Wabun Tribal Council and the Chiefs of the Robinson-Superior Area.



Ontario's electricity needs are largely met by power generated from nuclear, fossil fuel and hydroelectric energy sources.

In 1991, Ontario Hydro's nuclear generating stations supplied 50.8 per cent of total system energy, including production for secondary sales, compared to 43.3 per cent in 1990. Fossil-fuelled generation contributed 21.6 per cent, up from 20.0 per cent last year, and hydroelectric stations supplied 24.4 per cent, down from 26.7 per cent in 1990. Hydro purchased 1.7 per cent of its total energy from other provinces and the United States. Ontario-based non-utility generation purchases amounted to 1.5 per cent, four times the 1990 amount.

Nuclear Generation

Energy production at Hydro's nuclear generating stations for 1991 totalled almost 71 million megawatt-hours, an increase of 19 per cent over 1990. The Corporation's overall nuclear capability factor—indicating level of operating performance—for the year was 69.2 per cent, compared to 62.3 per cent in 1990.

The newer four-unit Pickering "B" and Bruce "B" generating stations continued to operate well, with a combined capability factor of 89 per cent. At the corresponding point in their life cycles, they are outperforming the older "A" stations by 7 per cent.

The reactor in Pickering "A" Unit 3 was retubed, and the unit rehabilitated, in 26 months. It was returned to service in August, significantly reducing outage time needed to retube Units 1 and 2. This is largely due to the team's continuous quality improvements and experience gained from earlier work.

Retubing work on Pickering "A" Unit 4 began in August and is expected to be completed within 19 months. The replacement of pressure tubes and additional rehabilitation work will ensure the continued safe and reliable operation of these units. In May, Ontario Hydro committed $854 million over the next eight years to a major rehabilitation project for Bruce "A" nuclear generating station. When complete, the station is targeted to operate at 85 per cent capability for the remainder of its service life, to 2018.

At the Darlington generating station, Unit 1 was being commissioned when it was shut down in March 1991 to carry out tests for potential fuel bundle damage. Unit 1 was restarted in December 1991 and reached full power in January 1992 before being shutdown for further inspection. Unit 1 is expected to be declared in-service in the second half of 1992. Units 3 and 4 are planned to be in-service in 1992 and 1993 respectively. Darlington Unit 2 was shutdown in January 1991 after an investigation in December 1990 revealed damage to some of the fuel bundles. Although the investigation is not complete, Unit 2 is expected to be returned to service in the second half of 1992.

Water samples are being taken from Hydro's hydroelectric, fossil and nuclear generating stations to help the Ministry of the Environment eliminate the discharge of toxic substances into Ontario's water bodies and to set pollution limits for the future.

Thermal Generation

In 1991, Ontario Hydro's fossil-fuelled generating stations—Atikokan, Thunder Bay, Lakeview, Lambton, Nanticoke, and Lennox—produced almost 30 million megawatt-hours of electricity, an increase of 9.3 per cent from 1990. The R.L. Hearn plant in Toronto did not generate electricity in 1991 but was used to regulate voltage levels in the Toronto area.

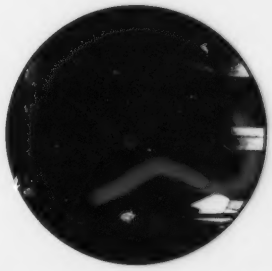
Major rehabilitation programs are in progress at Lakeview and Lambton generating stations to replace aging equipment, improve performance and extend service life.

At Lakeview, upgrading work on the precipitator in Unit 5 was completed. Flue gas conditioning equipment, for use while burning low-sulphur coal, was installed with good results. Rehabilitation of Unit 6 is scheduled for completion in early 1992, and work currently under way on Units 1 and 2 should be completed in late 1992.

Rehabilitation efforts are also proceeding at Lambton generating station to ensure a reliable electricity supply until 2015. Work is scheduled to begin on Unit 3 in March 1992, with full station rehabilitation expected by 1996.

At Nanticoke, a life management program to monitor and replace equipment as necessary was approved in 1991. Work proceeded on converting the wet fly ash system to a dry system. Four ash transfer buildings were erected, architectural work was completed and the installation of system equipment is proceeding.

An asbestos removal program was completed at the R.L. Hearn generating station in 1991. One of the largest projects of its kind undertaken in North America, Ontario Hydro received numerous inquiries from other Canadian utilities about the program.



Hydro employees discuss the life management process for fossil generating stations. This process preserves existing facilities by continually monitoring conditions and replacing equipment when necessary.

Hydroelectric Generation

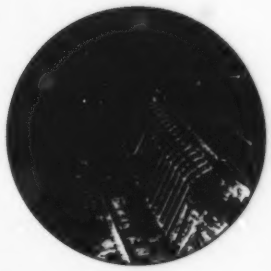
Ontario Hydro's hydroelectric generating stations produced almost 34 million megawatt-hours of energy in 1991, a decrease of 7.3 per cent from 1990 due to lower water levels. At yearend, installed capacity was 7,183 megawatts, including two megawatts that were added as a result of the hydroelectric generating unit upgrading program and 56 megawatts from the Smoky Falls generating station. Total hydroelectric capacity increased by 58 megawatts, or 0.8 per cent over 1990.

Construction work started on the redevelopment of the Big Chute generating station on the Severn River. When completed, it will add up to nine megawatts of capacity to the system.

The Smoky Falls Generating Station, near Kapuskasing, increases Hydro's hydroelectric capacity by 56 megawatts.

A computer-based system was developed to analyze the most efficient use of water in units at the R.H. Saunders generating station. This system automatically adjusts each generating unit to select the most efficient means of operating. A field prototype will be installed in 1992, and should enable the Saunders station to provide an additional 12,000 megawatt-hours of energy annually.

An Environmental Assessment of the Niagara River Hydroelectric Development (Sir Adam Beck 3) was submitted to the Ontario government for review in 1991. Also, the Mattagami River and Little Jackfish projects, submitted to the Ontario government in 1990, are currently under review.



Developing Ontario's hydroelectric potential is part of Hydro's plan to meet our future energy needs. The Sir Adam Beck 3 station proposed under the Niagara River Hydroelectric Development project will increase power supplies.

Non-Utility Generation

In 1991, independent power producers sold about two million megawatt-hours of energy to the Corporation. Ten new non-utility generation projects, totalling 153 megawatts, went into operation, and a further 16 facilities were under construction. When these projects are operating, a total of 78 non-utility generators will contribute 751 megawatts of capacity to the Hydro system. An additional five projects totalling 666 megawatts were approved but not contracted by the Corporation.

In December, Ontario Hydro notified non-utility generators that a temporary freeze was being placed on the non-utility generation program and that only small local projects of five megawatts or less would be considered for approval. Ontario Hydro put this hold on the program in light of the decreasing need for additional energy supply for the rest of the 1990s.

After a review of the program Hydro reopened discussions in February 1992 with the principals of the 13 non-utility projects (all over 5 megawatts) affected by the freeze. Ontario Hydro will work with these 13 projects to delay in-service dates, meet new energy efficiency guidelines and address operational concerns.

Hydroelectric projects over five megawatts will continue to be accepted by the Corporation as these involve a formal site development approval process and are expected to make only a small but needed contribution to local supply.

The 500 kilovolt transmission system was completed in southwestern Ontario, improving reliability and upgrading interconnections with other utilities.

Transmission

Hydro continued to expand its transmission and distribution system in 1991. The final phase of the Southwestern Ontario Transmission System was completed with a 500 kilovolt line connecting the Nanticoke generating station to the Longwood transformer station.

The new facilities will supply power from the Bruce Nuclear Power Development to the bulk electricity system, improving reliability to southwestern Ontario and upgrading Hydro's interconnections with other utilities.

To enable Hydro to supply additional power to Ontario's more heavily populated and industrialized centres, new transmission facilities have been planned for the area between Sudbury and Toronto. Environmental and technical feasibility studies were conducted for these new transmission facilities in 1991.

Hydro also developed an energy-saving pilot project aimed at reducing losses in the distribution system. The project involved modifications to transmission equipment from distribution stations and may result in an additional 100 megawatts of customer supply without any new generation.

Significant savings were also achieved by standardizing equipment used in overhead distribution systems, reducing costs by up to $30 million annually.

Videotaping of all 115, 230 and 500 kilovolt transmission lines was concluded in 1991. When completed in 1992, the project will provide a complete visual inventory of lines on a laser-disc system and establish a more effective work planning tool. Significant progress was also made in the development and use of new microprocessor technology to improve transmission system performance.

Videotaping all 115, 230 and 500 kilovolt lines will provide a visual inventory of lines on a laser disc system to help Hydro maintain our transmission system, reduce power losses and improve reliability.

Continuous Quality Improvement

Ontario Hydro expanded its Continuous Quality Improvement (CQI) programs, introduced in 1990, to encourage employee teamwork, improve productivity and to better meet customer needs.

In 1991, hundreds of CQI teams across the Corporation launched initiatives that resulted in significant gains in productivity, performance and safety in Hydro's operations, and better management and staff relations.

Ontario Hydro continued to promote a greater sense of partnership among its employee representatives for a more co-operative approach to solving labour problems. As a result, improved staff relations have increased Hydro's productivity.

In December, Ontario Hydro and CUPE Local 1000 agreed on a process to determine the use of contract services. The agreement, which gives management and union representatives joint decision-making responsibility, is expected to be implemented in early 1992.

Ontario Hydro also adopted a decentralized approach to implement Continuous Quality Improvement programs (CQI). To ensure uniform interaction with union representatives across the organization, Hydro and CUPE Local 1000 jointly established fundamental binding principles for all CQI teams. The new approach was also adopted for the 1992 Collective Agreement negotiations.

United Way

Ontario Hydro employees across the province raised $1,342,000 for the 1991 United Way campaign, up 14 per cent from 1990.

Employment Equity

Ontario Hydro continued to promote employment equity in the Corporation in 1991. A full-time employment equity specialist for Aboriginal affairs was hired to improve Hydro's relations with Aboriginal communities, and to focus on Aboriginal employment issues.

Ontario Hydro marked the second anniversary of the 1989 Montreal massacre by announcing a joint venture with the Ontario Women's Directorate to develop an employee awareness program about violence against women.

Hydro also completed implementation of our pay equity plans for union and management employees in 1991. The pay equity plan covering CUPE employees, which pays men and women the same wage for work of equal or comparable value, covers nearly 19,000 CUPE employees in clerical, technical, operating and maintenance trades positions. Approximately 16 per cent of these employees received pay equity adjustments. The average adjustment for 1991 was $1.70 per hour at a total cost to the Corporation of $8.3 million.

The Ontario Hydro management pay equity plan, covering all non-union staff, involves about 9,000 employees, 164 of which received pay equity adjustments. The 1991 average adjustment for staff in the plan was $1.50 per hour at a cost of $462,800.

SIR ADAM BECK AWARD

The 1991 Sir Adam Beck Award was presented to Larry Prevost for his outstanding contributions. Ontario Hydro's highest honour, the award is given annually in recognition of outstanding achievement by an employee.

Corporate Awards

Ontario Hydro's highest employee honour, the Sir Adam Beck award, was given to Larry Prevost in 1991 for his outstanding contribution to the Sarnia community and Ontario Hydro. The award is presented by the Chair and the President.

Also, Ontario Hydro presented 22 employees with New Technology Awards for staff-developed technologies saving Hydro $59.2 million over five years. In addition, cost savings of $4.9 million were achieved over the same period through Ontario Hydro's employee suggestion program.

FINANCIAL HIGHLIGHTS

1991 marked another year of challenge for Ontario Hydro as the Corporation continued to respond to unfavourable economic and operating conditions brought on by the recession, cost pressures, and the need to improve generation performance. As a result of these factors, financial performance for the year fell short of expectations, although 1991 net income improved over 1990.

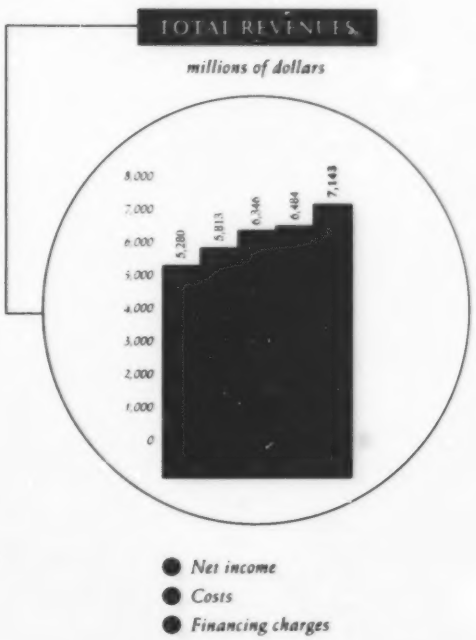
Total revenues for the year were $7,143 million, an increase of $659 million over 1990. The higher revenue resulted mainly from an average 8.6 per cent increase in the price of electricity. The recession, however, continued to affect demand for electricity in Ontario, limiting growth in 1991 to 1.2 per cent over 1990. This followed a decline of 3.5 per cent in the previous year.

Total operating costs for 1991, including financing charges, amounted to $6,939 million, a $584 million increase over 1990. The rise in operating costs was due primarily to a full year's impact of the higher financing and depreciation costs associated with Darlington Unit 2, which was placed in service in October of 1990, and higher program costs for maintenance and restoration activities.

Net income for 1991 was $204 million, compared to $129 million for 1990, an increase of $75 million.

Capital expenditures for investment in fixed assets during 1991 amounted to $3,934 million, a $390 million increase over 1990, reflecting continuing construction on the remaining three nuclear units at the Darlington generating station and rehabilitation of generation, transmission and distribution facilities.

Cash provided from operations and available for investment in fixed assets increased to $1,381 million in 1991 from $754 million in 1990. Proceeds from bonds issued by Ontario Hydro amounted to $5,787 million, of which 72.9 per cent or $4,220 million was raised through four global Canadian dollar issues. After repayment of outstanding debt, net borrowing amounted to $2,743 million.



RESULTS OF OPERATIONS

Revenues

Primary revenues for 1991 amounted to $7,081 million, an increase of 9.6 per cent or $619 million over 1990, due mainly to an average 8.6 per cent increase in the price of electricity in 1991.

Electricity sales to Hydro's three classes of primary customers—municipal utilities, rural retail customers and direct industrial customers—totalled 130,964 million kilowatt-hours, a 0.1 per cent increase over 1990. A 1.6 per cent increase in the volume of electricity sales to municipal customers was substantially offset by a decline in the volume of sales to rural retail customers and direct industrial customers, due to the impact of the recession.

Secondary revenues from the sale of surplus energy to power systems outside of Ontario, mainly to United States utilities, came to $62 million in 1991. Compared with 1990, this represents an increase of $40 million, due to higher

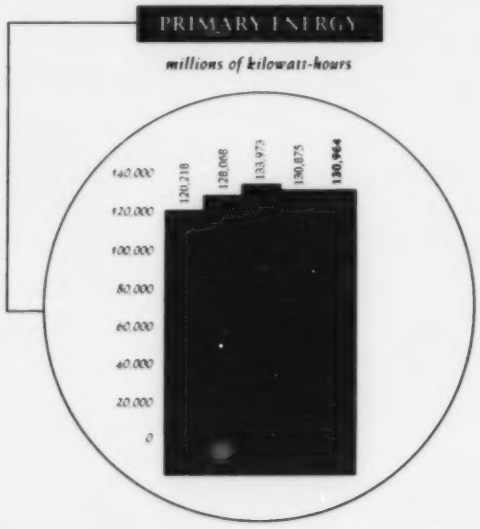
availability of energy from nuclear generation. The higher level of secondary sales helped to reduce the cost of electricity charged to customers in Ontario and has not compromised Hydro's ability to meet its acid gas emission limits for the year. In 1990, export sales were constrained to ensure Ontario Hydro's acid gas emissions were below the limit specified by provincial government regulation.

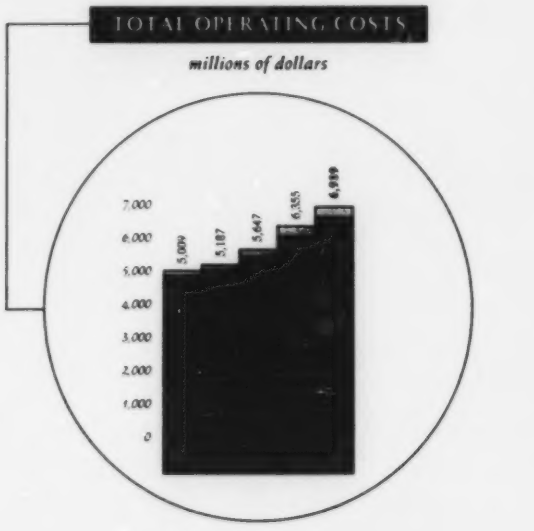
Total Operating Costs

Ontario Hydro's total operating costs for 1991 were $6,939 million, $584 million higher than in 1990. A significant portion of this increase, about $320 million, was due to a full year's impact of the costs associated with Darlington Unit 2, which was declared in service in October 1990. As each new generating unit is placed in service, the associated financing, depreciation and operation, maintenance and administration costs are charged to operations. In addition, Hydro continued to maintain and restore its aging generation and transmission facilities to ensure continued long-term reliability, further increasing operating costs.

Operation, Maintenance and Administration

In 1991, operation, maintenance and administration costs amounted to $2,037 million, an increase of $110 million or 5.7 per cent over 1990. This increase was due primarily to the higher initial operating costs associated with adding Darlington unit 2 to the power system, and higher program costs for maintenance and restoration activities. The benefits from the Darlington unit over its life include lower fuelling costs and reduced reliance on more costly supply alternatives. Generation performance, in particular performance related to Hydro's older nuclear generating units, has declined in recent years but increased restoration activities are beginning to result in improvement. In 1991, expenditures for energy management programs approximated $179 million, of which $88 million was capitalized and $91 million was charged to operations. In 1990, approximately $103 million was spent on energy management programs, of which $9 million was capitalized and $94 million was charged to operations. A number of energy management programs and services were provided to customers to help them use electricity more wisely. These initiatives will help to postpone the need to build new generating facilities and contribute to helping customers get the best value from their energy use.





Fuel and Fuel Related Costs

In 1991, fuel and the related costs of power purchases and the Nuclear Agreement-Payback, were 15.0 per cent lower than in 1990.

The 1991 fuel costs for coal, uranium, oil and water rental payments other than to the Province of Ontario came to $1,128 million, $93 million higher than in 1990, reflecting greater electricity generation. In 1991, Ontario Hydro cancelled its long-term uranium supply contracts with Denison Mines Limited and Rio Algom Limited. Since the contracts were entered into in the late 1970s, the world market price for uranium has fallen significantly. The decision to restructure the uranium supply program was undertaken to reduce Ontario Hydro's electricity rates in future years as the lower costs associated with future uranium purchases will more than offset the costs associated with cancelling the contracts.

In 1991, Ontario Hydro purchased $151 million of electricity, $89 million from independent power producers located in Ontario and $62 million from neighbouring utilities. Hydro's need to purchase power has decreased $326 million from 1990, due to higher nuclear generation in the year. The Corporation is, however, still a net importer of electricity, a trend which started in 1989. Hydro buys electricity when it is economical to do so and during periods of peak demand or in emergencies. Purchases are also used to manage acid gas emission levels. The provincial regulatory limit on acid gas emissions for 1991 was 280,000 tonnes, down from 430,000 tonnes two years ago. The Corporation's acid gas emissions for the year were estimated at 222,000 tonnes, well within the regulatory limit.

Provincial Government Levies

Provincial government levies are payments made to the Province of Ontario with respect to the debt guarantee fee and water rentals.

Ontario Hydro is required to pay to the Province an annual debt guarantee fee of one half of one per cent on the total debt guaranteed by the Province outstanding on the preceding December 31. The fee for 1991 is $147 million, up $14 million from 1990.

Provincial water rental payments, related to the use of provincial waters by Ontario Hydro in the operation of its hydroelectric stations, amounted to $105 million in 1991, an increase of $3 million over 1990. The increased payments reflect the impact of higher water rental rates partially offset by a decrease in hydroelectric generation.

In addition to provincial government levies, Ontario Hydro, similar to other businesses, also made payments of approximately $249 million to various government agencies in 1991. This amount includes payments in lieu of taxes to municipalities, provincial sales taxes, Unemployment Insurance Commission premiums, Canada Pension Plan contributions and Employer Health Tax payments.

Depreciation

Depreciation charged to operations totalled $1,136 million in 1991, an increase of $228 million or 25.1 per cent over 1990. The increase reflects the depreciation costs for new generating facilities, primarily Darlington Unit 2, and an increase in the charges for fixed asset and other removal costs, including decommissioning costs.

Financing Charges

Financing charges comprise interest charged to operations and foreign exchange costs. Interest charged to operations represents gross interest reduced by capitalized interest and interest earned on investments. By capitalizing interest related to assets under construction until the assets are placed in service, Hydro equitably allocates costs between current and future customers. Foreign exchange costs mainly represent the amortization of gains or losses on the principal amount of foreign debt.

Gross interest costs for 1991 amounted to $3,583 million, an increase of $379 million or 11.8 per cent over 1990. This increase is primarily related to additional funds borrowed during the year to help finance construction programs. The increase was partially offset by the favourable impact of the relatively stronger Canadian dollar on United States interest payments and the refinancing of matured debt at lower interest rates.

Interest charged to operations rose to $2,234 million in 1991, $431 million or 23.9 per cent higher than in 1990. The increase was primarily due to interest charged to operations on debt related to Darlington Unit 2, which was declared in service in October 1990, and new facilities placed in service during 1991.

Net Income

Ontario Hydro had planned a relatively low level of net income for 1991 so as to moderate the increase in electricity prices, and had planned for a withdrawal from the reserve for stabilization of rates and contingencies to meet the statutory appropriation for debt retirement. Net income for 1991 came to $204 million, an increase of $75 million over the 1990 level of $129 million, but still falling short of plans.

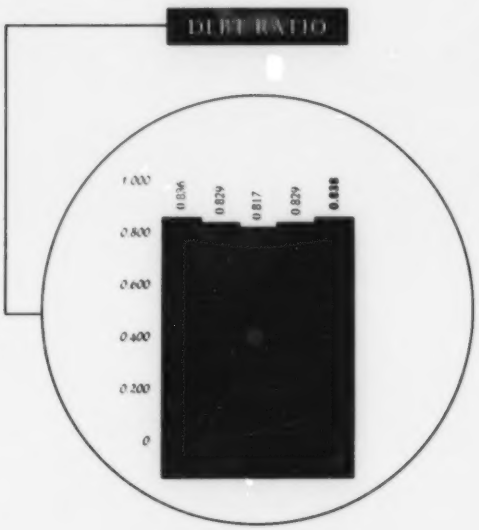
The appropriation for debt retirement in 1991 was $416 million and the withdrawal from the reserve for stabilization of rates and contingencies was $212 million. In 1990, the amounts were $374 million and $245 million, respectively. Ontario Hydro's total equity increased by the year's net income to total $6.6 billion at the end of 1991.

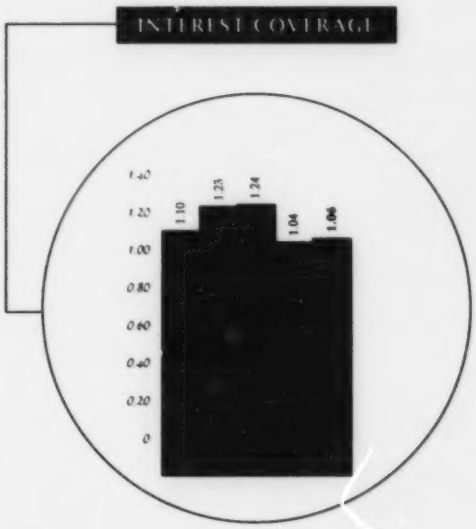
Financial Indicators

The Power Corporation Act requires Ontario Hydro to include in its rates an appropriation for the retirement of debt. The Act also enables the Corporation to include in rates an amount to contribute to a reserve for the stabilization of rates and contingencies. Together, these amounts build equity for the Corporation enabling it to operate as a financially self-sustaining entity. The Corporation's financial performance is monitored using two main indicators: interest coverage ratio and debt ratio.

The level of interest coverage measures the extent to which net income contributes toward Hydro's ability to meet its gross interest payments. An increase in the interest coverage ratio indicates a strengthening in the Corporation's financial position. The level of interest coverage increased to 1.06 in 1991 from 1.04 in 1990, due mainly to the increase in net income.

The debt ratio measures the extent to which Hydro's assets are financed by debt. A reduction in the debt ratio





indicates a strengthening in financial position, as a relative increase in equity provides additional financial flexibility. The debt ratio at the end of 1991 was 0.838 compared to the 1990 ratio of 0.829, due mainly to the net increase in long-term debt used to help finance investment in fixed assets.

CAPITAL EXPENDITURES AND FINANCING

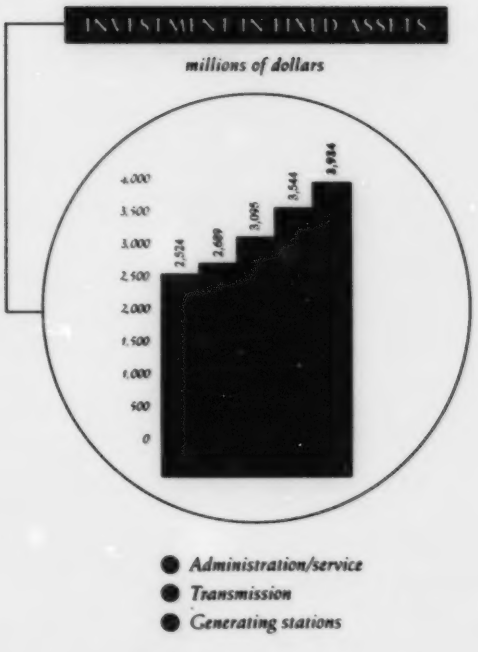
Investment in Fixed Assets

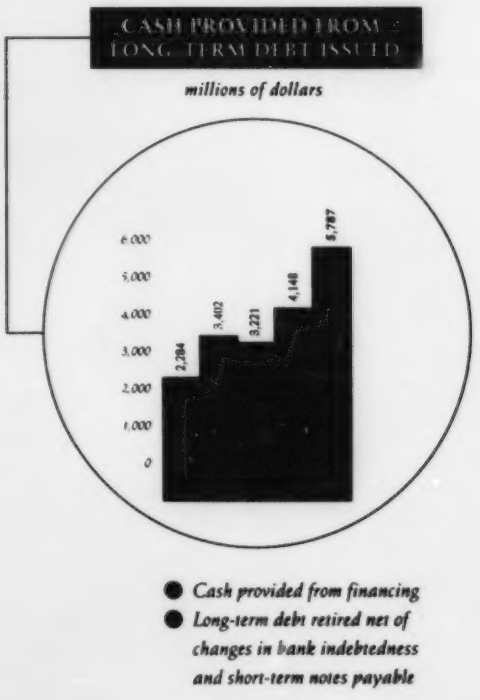
Ontario Hydro invests in fixed assets to meet expected growth in the demand for electricity and to meet regulatory requirements. The total assets of the Corporation at the end of 1991 were $43,244 million, 88.3 per cent of which represented fixed assets in service or under construction. This relatively high percentage reflects the capital intensive nature of Ontario Hydro's business.

The investment in fixed assets during 1991 totalled $3,934 million. Of this amount, $1,223 million was spent on construction of Darlington Units 1 and 3 which are expected to be placed in service in the second half of 1992, and Unit 4 which is expected to be placed in service in 1993. In addition, the 1991 expenditures reflect continued emphasis on investment in the transmission and distribution facilities to maintain a high level of service and reliability. During 1991, $917 million was invested in constructing major transmission and distribution facilities, such as the 500 kilovolt transmission lines in southwestern Ontario. In addition, $203 million was spent on rehabilitation of Lambton and Lakeview fossil generating stations.

Financing and Capital Markets

The cash required by Ontario Hydro to finance its investment in fixed assets comes from two major sources: operations and external financing through borrowing. For 1991, operations provided $1,381 million and cash provided from financing was $2,748 million. The cash provided from operations was $627 million higher than 1990, reflecting a higher net income and a net decrease in working capital. Cash provided from financing consists of cash from issuing long-term debt and the change in bank indebtedness and short-term notes payable, less the amount of cash used to retire long-term debt.





Proceeds of $5,787 million from bonds issued by Ontario Hydro during 1991 were used for capital expenditures and refinancing maturing debt. Ontario Hydro continued with its initiative to diversify its access to major capital markets. In 1991, Hydro successfully undertook four global Canadian dollar issues, including the first 30-year international Canadian bond issue and a 40-year serial zero coupon bond issue. In addition, issues were undertaken in the Eurodollar and Swiss Franc markets. All foreign currency denominated issues undertaken in 1991 were fully hedged into Canadian dollars. The issues had an average interest rate of 10.3 per cent for an average term to maturity of 18 years. In 1990, proceeds from bonds issued amounted to $4,148 million, resulting from 12 Canadian dollar issues and one U.S. dollar issue which was fully hedged into Canadian dollars.

Cash amounting to $1,650 million was used to retire maturing long-term debt in 1991, compared with $1,633 million in 1990. In addition, during 1991, cash amounting to $1,394 million was used to redeem debt prior to maturity. In 1990, no debt was redeemed prior to maturity. Net borrowing for 1991, after the retirement and redemption of long-term debt, amounted to $2,743 million compared with $2,515 million in 1990.

OUTLOOK

Over the next few years, Ontario Hydro's revenues are expected to increase as a result of the forecast growth in electricity demand and rate increases. Hydro's current forecast indicates that the demand for electricity is expected to increase at a modest rate as the Ontario economy recovers from the recession. Electricity price increases are expected to be significantly higher than the rate of inflation, despite Hydro's efforts to moderate such price increases.

Major cost pressures affecting electricity rates include the impact of bringing the remaining three Darlington generating units into operation during a period of modest increase in the demand for electricity. Although placing these units in service will initially increase total operating costs by a significant amount, long-term benefits will result from lower fuelling costs. In addition, greater emphasis will be placed on improving the performance of aging generation and transmission facilities. Restoration programs are now underway and improvements in operating performance are expected with the completion of the various projects. Hydro also has an ambitious long-term energy management program and expects to increase its efforts in this area over the next few years. The energy management program will provide benefits in the longer term to Hydro's customers and the environment. Such benefits include postponing the need to build new generating facilities. In the near-term, however, some additional expenditures will have to be incurred.

Investment in fixed assets is expected to remain at a high level reflecting construction activities associated with generation, transmission and rehabilitation projects. The Corporation has embarked on a major rehabilitation program to improve the reliability and efficiency of its existing system. In some cases, these projects will extend the service lives of the facilities.

Hydro's planned borrowing is forecast to decrease over the next few years from the relatively high level in 1991. Near-term capital market conditions are expected to be less favourable than the past year, reflecting an anticipated increase in the competition for funds. The Corporation plans to further develop its access to the domestic and international capital markets.

The programs to improve operating performance, combined with the forecast recovery in the Ontario economy, is expected to lead to an improvement in Hydro's overall financial performance over the next few years.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The accompanying financial statements of Ontario Hydro are the responsibility of management and have been prepared in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. The significant accounting policies followed by Ontario Hydro are described in the Summary of Significant Accounting Policies. The preparation of financial statements necessarily involves the use of estimates based on management's judgement, particularly when transactions affecting the current accounting period cannot be finalized with certainty until future periods. The financial statements have been properly prepared within reasonable limits of materiality and in light of information available up to March 9, 1992. The information presented elsewhere in the Annual Report is consistent with that in the financial statements.

Management maintains a system of internal controls designed to provide reasonable assurance that the assets are safeguarded and that reliable financial information is available on a timely basis. The system includes formal policies and procedures and an organizational structure that provides for appropriate delegation of authority and segregation of responsibilities. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and the Audit Committee of the Board of Directors.

The financial statements have been examined by Ernst & Young, independent external auditors appointed by the Lieutenant-Governor-in-Council of Ontario. The external auditors' responsibility is to express their opinion on whether the financial statements are fairly presented in accordance with generally accepted accounting principles. The Auditors' Report, which appears below, outlines the scope of their examination and their opinion.

The Board of Directors, through the Audit Committee, is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal controls. The Audit Committee meets periodically with management, the internal auditors and the external auditors to satisfy itself that each group has properly discharged its respective responsibility, and to review the financial statements before recommending approval by the Board of Directors. The external auditors have direct and full access to the Audit Committee, with and without the presence of management, to discuss their audit and their findings as to the integrity of Ontario Hydro's financial reporting and the effectiveness of the system of internal controls.

On behalf of Management,

M. Ellesen

Chair

E. V. Lundell

Senior Vice-President, Finance

Toronto, Canada,
March 9, 1992

AUDITORS' REPORT

To the Board of Directors of Ontario Hydro:

We have audited the statement of financial position of Ontario Hydro as at December 31, 1991 and the statements of operations, accumulated debt retirement appropriations, reserve for stabilization of rates and contingencies and source of cash used for investment in fixed assets for the year then ended. These financial statements are the responsibility of Ontario Hydro's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of Ontario Hydro as at December 31, 1991 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Toronto, Canada,
March 9, 1992

Ernst & Young

Chartered Accountants

FINANCIAL STATEMENTS
SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. The significant accounting policies followed by Ontario Hydro are described below.

Rate setting

Ontario Hydro has broad powers to generate, supply and deliver electric power throughout the Province of Ontario. The Corporation operates under the Power Corporation Act and is subject to provisions of the Ontario Energy Board Act.

Under the provisions of the Power Corporation Act, the price payable by municipal corporations is the cost of operating and maintaining the system, depreciation, interest, and the amounts appropriated for debt retirement and stabilization of rates and contingencies. The debt retirement appropriation is the amount required under the Act to accumulate on a sinking fund basis over 40 years a sum equal to the debt incurred for the cost of the fixed assets in service. The appropriation for, or withdrawal from, the stabilization of rates and contingencies reserve is an amount established to maintain a sound financial position and to stabilize the effect of cost fluctuations.

Under the provisions of the Ontario Energy Board Act, a public hearing before the Ontario Energy Board is required to review any changes in electricity rates proposed by Ontario Hydro which affect its municipal utilities, direct industrial customers, or, if the Minister of Energy so directs, rural retail customers. The Ontario Energy Board then submits its recommendations to the Minister of Energy. After considering the recommendations of the Ontario Energy Board, Ontario Hydro's Board of Directors, under the authority of the Power Corporation Act, establishes the electricity rates to be charged to customers.

If the Board of Directors specifies an amount related to a certain transaction be included in future electricity rates that, in accordance with the accounting policies summarized below, would be charged or credited to operations in the current year, then this amount is deferred and amortized to future operations on a basis consistent with its inclusion in rates.

Fixed assets

Fixed assets in service include operating facilities and non-operating reserve facilities. Construction in progress includes fixed assets under construction and heavy water held for use in nuclear generating stations under construction.

Fixed assets are capitalized at cost which comprises material, labour, engineering costs, overheads, depreciation on service equipment, interest applicable to capital construction activities, and for new facilities, the costs of training initial operating staff. In the case of generating facilities, the cost also includes the net cost of commissioning which comprises the cost of start-up less the value attributed to energy produced by generation facilities during their commissioning period. For multi-unit facilities, a proportionate share of the cost of common facilities is placed in service with each major operating unit. The cost of heavy water comprises the direct cost of production and applicable overheads, as well as interest and depreciation on the heavy water production facilities and the estimated removal costs of these facilities. Leases which transfer the benefits and risks of ownership of assets to Ontario Hydro are capitalized.

Interest is capitalized on construction in progress at rates (1991: 10.8 per cent, 1990: 10.8 per cent) which approximate the average cost of long-term funds borrowed in the years in which expenditures have been made for fixed assets under construction. If the construction period of a project is extended and the construction activities are continued, interest is capitalized during the period of extension provided that the project has a reasonable expectation of being completed.

If a project is cancelled or deferred indefinitely with a low probability of resuming construction, all costs, including the costs of cancellation, are written off to operations.

If fixed assets are removed from operations and mothballed for future use, termed non-operating reserve facilities, the costs of mothballing are charged to operations.

Depreciation

The capital costs of fixed assets in service are depreciated on a straight-line basis. Depreciation rates for the various classes of assets are based on their estimated service lives. Major components of fossil and nuclear generating stations are depreciated over the lesser of the service life expectancy of the major components or the remaining service life of the associated generating station; for hydroelectric generating stations, major components are depreciated over the service life expectancy of the component, ranging from 15 to 100 years. The estimated service lives of assets in the major classes are:

Generating stations – fossil	40 years
– nuclear	40 years
Heavy water	over the period ending in the year 2040
Transmission and distribution facilities	15 to 60 years
Heavy water production facilities	20 years
Administration and service facilities	5 to 65 years

In accordance with group depreciation practices, for normal retirements the cost of fixed assets retired is charged to accumulated depreciation with no gain or loss reflected in operations. However, gains and losses on sales of fixed assets and losses on premature retirements are charged to operations in the year incurred as adjustments to depreciation expense.

When the costs of removal less residual value, termed removal costs, on retirements of fixed assets can reasonably be estimated and are significant, provisions for these costs, except for those related to heavy water production facilities, are charged to depreciation expense on an annuity basis over the remaining service life of the related fixed assets. For heavy water production facilities, provisions for removal costs are charged to heavy water production costs on a straight-line basis over the remaining service life of the related facilities. Removal costs that are provided for include the estimated costs of decommissioning nuclear and fossil stations and heavy water production facilities, and the estimated costs of removing certain nuclear reactor fuel channels. Other removal costs are charged to depreciation expense as incurred.

The estimated service lives of fixed assets and the significant assumptions underlying the estimates of fixed asset removal costs are subject to periodic review. Any changes arising out of such a review are implemented on a remaining service life basis from the year the changes can first be reflected in electricity prices.

Non-operating reserve facilities are amortized so that any estimated loss in value is charged to depreciation expense on a straight-line basis over their expected non-operating period.

Unamortized advances for fuel supplies

In prior years, Ontario Hydro made advances under long-term fuel supply contracts for pre-production costs to suppliers in advance of the fuel delivery. These payments and associated costs, including interest, are carried in the accounts as unamortized advances for fuel supplies to the extent that the advances will be offset by future fuel deliveries. The advances are amortized to fuel inventory as the fuel is delivered.

Fuel for electric generation

Fuel used for electric generation comprises the average inventory costs of fuel consumed, the value attributed to commissioning energy produced, and provisions for disposal of nuclear fuel irradiated during the period. The inventory cost of fuel consumed comprises fuel purchases, transportation and handling costs, and the amortization of advances for fuel supplies. Transportation costs include charges for interest and depreciation on railway equipment owned by Ontario Hydro. The value attributed to commissioning energy produced during the period represents the incremental operating and fuel costs of producing the same quantity of energy at generating units displaced because of the commissioning activity. The costs for disposal of nuclear fuel irradiated in each period are charged to operations based on estimated future expenditures and interest accumulating to the estimated date of disposal. Estimates of expenditures, interest and escalation rates, and the date of disposal are subject to periodic review. Adjustments resulting from changes in estimates are charged to operations on an annuity basis over the period from the year the changes can first be reflected in electricity prices to the estimated in-service date of the disposal facility.

Foreign currency translation

Current monetary assets and liabilities in foreign currencies are translated to Canadian currency at yearend rates of exchange and the resultant exchange gains or losses are credited or charged to operations. Long-term debt payable in foreign currencies is translated to Canadian currency at yearend rates of exchange. Resulting unrealized exchange gains or losses are deferred and included in unamortized debt costs, and are amortized to operations on an annuity basis over the remaining life of the related debt.

Foreign exchange gains or losses on hedges of long-term debt payable in foreign currencies are deferred and included in unamortized debt costs. The deferred gains or losses on hedges are amortized to operations in the periods the hedges provide benefit.

Foreign exchange gains or losses on early redemption of long-term debt are deferred and included in unamortized debt costs if the exposure in the foreign currency related to the redeemed debt is not reduced as a result of the refinancing of the redeemed debt in the same currency. These deferred gains or losses are amortized on an annuity basis over the period to the original maturity date of the redeemed debt. If the foreign currency exposure is reduced as a result of the early redemption of debt, the resulting foreign exchange gains or losses related to the redeemed debt are credited or charged to operations.

Unamortized debt costs

Unamortized debt costs include the unamortized amounts related to unrealized foreign exchange gains or losses resulting from the translation of foreign currency long-term debt; foreign exchange gains or losses on hedges; foreign exchange gains or losses on the early redemption of long-term debt; discounts or premiums arising from the issuance of debt or the acquisition of debt prior to maturity; and discounts or premiums accrued on foreign currency hedges.

Debt discounts or premiums arising from the issuance of debt are amortized over the period to maturity of the debt. Discounts or premiums on debt acquired prior to the date of maturity are amortized over the period from the acquisition date to the original maturity date of the debt. Discounts or premiums on foreign currency hedges related to principal and interest payments are credited or charged to operations over the terms of the individual hedges.

Demand management

Demand management activities undertaken by Ontario Hydro encourage customers to conserve or use electricity more efficiently. Demand management costs that have reasonably assured and specifically identifiable future benefits to Ontario Hydro are deferred and amortized to operations on a straight-line basis over the periods that benefit. Otherwise, the costs are charged to operations as incurred. The benefit periods of deferred demand management costs are subject to periodic review. Any changes arising out of such a review are implemented on a remaining benefit period basis from the year the changes can first be reflected in electricity prices.

Nuclear agreement-payback

Ontario Hydro, Atomic Energy of Canada Limited and the Province of Ontario are parties to a joint undertaking for the construction and operation of Units 1 and 2 of Pickering nuclear generating station, with ownership of these units being vested in Ontario Hydro. Contributions to the capital cost by Atomic Energy of Canada Limited and the Province of Ontario amounted to $258 million and these have been deducted in arriving at the value of fixed assets in service in respect of Pickering Units 1 and 2. Ontario Hydro is required to make monthly payments, termed "payback", until the year 2003 to each of the parties in proportion to their capital contributions. Payback, in a broad sense, represents the net operational advantage of having the power generated by Pickering Units 1 and 2, compared with power generated by coal-fired units similar to Lambton Units 1 and 2.

During the 1983 through 1988 shutdown period for replacement of pressure tubes in Pickering Units 1 and 2, the payback calculations resulted in negative payback amounts. These amounts have been credited against the cost of operations over the shutdown period and the accumulated amounts, plus interest, are included in the accounts as long-term accounts receivable. With the return to operation of the last of the two units, the accumulated negative payback amounts, plus interest, are being offset against positive payback amounts payable over the remaining term of the Agreement to Atomic Energy of Canada Limited and to the Province of Ontario.

Pension plan

The pension plan is a contributory, defined benefit plan covering all regular employees of Ontario Hydro. Pension costs for accounting purposes are actuarially determined based on the assumptions that reflect management's best estimate of the effect of future events on the actuarial present value of accrued pension benefits, and the valuation of pension plan assets using a five-year market value average. Pension plan surpluses and deficiencies are amortized on an annuity basis over the expected average remaining period of service of the employees covered by Ontario Hydro's pension plan.

Research and development

Research and development costs are charged to operations in the year incurred, except for those related directly to the design or construction of a specific capital facility which are capitalized as part of the facility.

STATEMENT OF OPERATIONS

for the year ended December 31, 1991

millions of dollars	1991	1990
Revenues		
Primary power and energy		
Municipal utilities	**4,873**	4,373
Rural retail customers	**1,397**	1,297
Direct industrial customers	**811**	792
	7,081	6,462
Secondary power and energy (note 1)	**62**	22
	7,143	6,484
Costs		
Operation, maintenance and administration	**2,037**	1,927
Fuel used for electric generation	**1,128**	1,035
Power purchased	**151**	477
Nuclear agreement – payback	**(6)**	(15)
Provincial government levies (note 2)	**252**	235
Depreciation (note 3)	**1,136**	908
	4,698	4,567
Income before financing charges	**2,445**	1,917
Financing charges		
Interest (note 4)	**2,234**	1,803
Foreign exchange	**7**	(15)
	2,241	1,788
Net income	**204**	129
Appropriation for (withdrawal from):		
Debt retirement	**416**	374
Stabilization of rates and contingencies	**(212)**	(245)
	204	129

See accompanying summary of significant accounting policies and notes to financial statements.

STATEMENT OF FINANCIAL POSITION

as at December 31, 1991

millions of dollars	1991	1990
ASSETS		
Fixed assets (note 5)		
Fixed assets in service	**34,369**	32,497
Less accumulated depreciation	**8,744**	7,823
	25,625	24,674
Construction in progress	**12,545**	10,465
	38,170	35,139
Current assets		
Accounts receivable	**919**	751
Fuel for electric generation (note 6)	**1,342**	1,352
Materials and supplies, at cost	**402**	398
	2,663	2,501
Other assets		
Unamortized debt costs	**252**	248
Unamortized advances for fuel supplies (note 7)	**81**	709
Unamortized deferred costs (note 8)	**858**	227
Deferred pension costs	**515**	–
Unamortized deferred demand management costs	**94**	9
Long-term accounts receivable and other assets	**611**	540
	2,411	1,733
	43,244	39,373

See accompanying summary of significant accounting policies and notes to financial statements.

millions of dollars	1991	1990
LIABILITIES		
Long-term debt (note 9)	**30,097**	27,701
Current liabilities		
Bank indebtedness (note 10)	**641**	622
Accounts payable and accrued charges	**876**	727
Short-term notes payable	**94**	108
Accrued interest	**942**	768
Long-term debt payable within one year	**2,063**	1,677
	4,616	3,902
Other liabilities		
Long-term accounts payable and accrued charges	**571**	230
Accrued fixed asset removal and irradiated fuel disposal costs (note 11)	**1,341**	1,124
	1,912	1,354
CONTINGENCIES (note 7)		
EQUITY		
Accumulated debt retirement appropriations	**4,716**	4,301
Reserve for stabilization of rates and contingencies	**1,776**	1,988
Contributions from the Province of Ontario as assistance for rural construction	**127**	127
	6,619	6,416
	43,244	39,373

On behalf of the Board,

M. Eliesen

Chair

President

Toronto, Canada,
March 9, 1992

STATEMENT OF ACCUMULATED DEBT RETIREMENT APPROPRIATIONS

for the year ended December 31, 1991

	1991			1990
	Municipal Utilities	*Power District (Rural Retail and Direct Industrial Customers)*	*Total*	*Total*
millions of dollars				
Balances at beginning of year	**2,974**	**1,327**	**4,301**	3,927
Appropriation	**288**	**128**	**416**	374
Transfers and refunds on annexations by municipal utilities	**14**	**(15)**	**(1)**	–
Balances at end of year	**3,276**	**1,440**	**4,716**	4,301

STATEMENT OF RESERVE FOR STABILIZATION OF RATES AND CONTINGENCIES

for the year ended December 31, 1991

	1991					1990
	Held for the benefit of all customers	*Held for the benefit of certain groups of customers*				
		Municipal Utilities	*Rural Retail Customers*	*Direct Industrial Customers*	*Total*	*Total*
millions of dollars						
Balances at beginning of year	**1,967**	**1**	**14**	**6**	**1,988**	2,233
Appropriation (withdrawal)	**(209)**	**–**	**–**	**(3)**	**(212)**	(245)
Balances at end of year	**1,758**	**1**	**14**	**3**	**1,776**	1,988

See accompanying summary of significant accounting policies and notes to financial statements.

STATEMENT OF SOURCE OF CASH USED FOR INVESTMENT IN FIXED ASSETS

for the year ended December 31, 1991

	1991	1990
millions of dollars		
Cash provided from operations (note 12)	**1,381**	754
Cash provided from financing		
Long-term debt issued	**5,787**	4,148
Long-term debt retired	**(3,044)**	(1,633)
	2,743	2,515
Changes in cash and cash equivalents		
Bank indebtedness – increase	**19**	266
Short-term notes payable – (decrease) increase	**(14)**	108
	5	374
Cash provided from financing	**2,748**	2,889
Cash provided from operations and financing	**4,129**	3,643
Cash used for financing other assets	**(773)**	(51)
Cash used for investment in fixed assets (note 12)	**3,356**	3,592

See accompanying summary of significant accounting policies and notes to financial statements.

1. SECONDARY POWER AND ENERGY

Secondary power and energy revenues include $60 million (1990: $20 million) from sales of electricity to United States utilities.

2. PROVINCIAL GOVERNMENT LEVIES

millions of dollars	1991	1990
Provincial water rentals	**105**	102
Provincial debt guarantee fee	**147**	133
	252	235

Provincial government levies are the amounts charged by the Ontario Provincial Government for the debt guarantee fee and water rentals.

Provincial water rentals

Provincial water rentals are the amounts paid to the Province of Ontario for the use of water for hydroelectric generation.

Provincial debt guarantee fee

The Province of Ontario has legislated that Ontario Hydro pay to the Province an annual debt guarantee fee of one half of one per cent on the total debt guaranteed by the Province outstanding as of the preceding December 31.

3. DEPRECIATION

millions of dollars	1991	1990
Depreciation of fixed assets in service	**991**	858
Amortization of deferred costs	**39**	39
Fixed asset removal costs	**140**	87
Other removal costs	**84**	38
	1,254	1,022
Less:		
Depreciation charged to – construction in progress	**68**	59
– heavy water production	**50**	50
– fuel for electric generation	**2**	2
Other	**(2)**	3
	118	114
	1,136	908

4. INTEREST

millions of dollars	1991	1990
Interest on bonds, notes, and other debt	**3,462**	3,096
Interest on accrued fixed asset removal and irradiated fuel disposal costs	**121**	108
	3,583	3,204
Less:		
Interest charged to – construction in progress	**1,093**	1,169
– heavy water production	**62**	71
– fuel for electric generation	**38**	78
Interest earned on investments	**156**	83
	1,349	1,401
	2,234	1,803

5. FIXED ASSETS

	1991		
millions of dollars	*Assets in Service*	*Accumulated Depreciation*	*Construction in Progress*
Generating stations – hydroelectric	**2,172**	**714**	**473**
– fossil	**3,972**	**1,705**	**664**
– nuclear	**14,184**	**2,561**	**8,935**
Heavy water	**2,909**	**391**	**1,453**
Transmission and distribution	**8,192**	**1,979**	**895**
Heavy water production facilities	**1,129**	**603**	**–**
Administration and service facilities	**1,811**	**791**	**125**
	34,369	**8,744**	**12,545**

	1990		
millions of dollars	*Assets in Service*	*Accumulated Depreciation*	*Construction in Progress*
Generating stations – hydroelectric	1,972	689	81
– fossil	3,992	1,630	527
– nuclear	13,545	2,118	7,718
Heavy water	2,907	340	1,181
Transmission and distribution	7,349	1,797	839
Heavy water production facilities	1,129	551	–
Administration and service facilities	1,603	698	119
	32,497	7,823	10,465

5. FIXED ASSETS *continued*

A major portion of the construction in progress as at December 31, 1991 relates to the construction program for the Darlington nuclear generating station. The cost of construction in progress associated with this program, including heavy water, amounted to $9,482 million as at December 31, 1991 (1990: $8,268 million).

Darlington Unit 2 was declared in-service for commercial operation in October 1990. In December 1990, investigation into a refuelling problem in this unit revealed damage to some fuel bundles. As a consequence, the unit was shut down in January 1991 for more detailed inspection and investigation of the problem. Although the investigation is not yet complete, Unit 2 is expected to be restarted in the second half of 1992. Unit 1 was being commissioned when it was shut down in March 1991 in order to carry out planned tests and inspection for potential fuel bundle damage. Unit 1 was restarted in December 1991 and reached full power in January 1992 before being shut down for further tests and inspection. Units 1 and 3 are forecast to be declared in-service in the second half of 1992. Unit 4 is planned to be placed in-service in 1993. When completed, the Darlington nuclear generating station will provide a total of 3,524 megawatts of dependable capacity. The estimated cost to complete the Darlington construction program is $1,149 million, including cost escalation and interest of approximately $754 million. Because of the uncertainties associated with long construction lead times and planned in-service dates, the estimated cost to complete the station is subject to change.

6. FUEL FOR ELECTRIC GENERATION

millions of dollars	1991	1990
Inventories – uranium	773	733
– coal	483	518
– oil	86	101
	1,342	1,352

7. UNAMORTIZED ADVANCES FOR FUEL SUPPLIES

millions of dollars	1991	1990
Uranium – Rio Algom Limited	68	399
– Denison Mines Limited	13	310
	81	709

In prior years, Ontario Hydro entered into long-term contracts with Rio Algom Limited (Rio Algom) and Denison Mines Limited (Denison) for uranium supplies.

Rio Algom Limited: In June 1991, Ontario Hydro and Rio Algom agreed to amend the long-term uranium supply contract (Rio Algom Contract). The amendments include lowering the prices for deliveries of uranium concentrates over the period 1991 through 1996. In addition, Ontario Hydro and Rio Algom agreed to terminate the Rio Algom Contract effective December 31, 1996. At the expiration of the Rio Algom Contract, Rio Algom is not required to refund any outstanding advances that Ontario Hydro has made for pre-production costs and Ontario Hydro is required to pay for mine related termination costs, including mine shutdown. Ontario Hydro will make contributions totalling $65 million over the period 1991 through 1993, for use in carrying out the Ontario government's Elliot Lake Region Economic Development Program (Elliot Lake Program). The outstanding advances and associated costs at the expiration of the Rio Algom Contract,

7. UNAMORTIZED ADVANCES FOR FUEL SUPPLIES *continued*

the estimated mine-related termination costs and the contributions to the Elliot Lake Program are estimated to total $448 million. This amount will not be charged directly to operations in 1991, since the Board of Directors, under its rate setting authority, determined that this amount will be deferred and amortized for recovery through future electricity rates on a straight-line basis over the period 1994 through 2003 (see note 8).

Denison Mines Limited: In April 1991, Ontario Hydro notified Denison, pursuant to the provisions in the contract, that the long-term uranium supply contract (Denison Contract) will be terminated effective January 1, 1993. On termination of the Denison Contract, Denison is not required to refund any outstanding advances that Ontario Hydro has made for pre-production costs. The outstanding advances and associated costs at the effective date of cancellation of the Denison Contract are estimated to be $269 million. This amount will not be charged directly to operations in 1991, since the Board of Directors, under its rate setting authority, determined that this amount will be deferred and amortized for recovery through electricity rates on a straight-line basis over the period 1992, the first year such cost can be reflected in rates, through 2001 (see note 8).

In November 1991, Denison submitted to Ontario Hydro a statement containing its proposed estimated price to be billed to Ontario Hydro for uranium deliveries in 1992. The statement included a significant additional amount for depreciation and other costs, which Denison claims result from a revision to the estimated life of its Elliot Lake uranium mine as a consequence of the contract termination by Ontario Hydro and Denison's decision to close the mine. Ontario Hydro informed Denison that its statement did not represent compliance by Denison with its obligations to deliver a valid estimate of the cost of production of a pound of uranium concentrates for 1992. The position being asserted by Denison would result in additional charges estimated to be in excess of $300 million related to uranium deliveries in 1991 and 1992. On January 30, 1992, Ontario Hydro initiated legal action against Denison in the Ontario Court (General Division) disputing such charges and requesting the Court to rule on certain aspects of the Denison Contract with respect to the dispute. Subsequently, on February 27, 1992, Denison applied to the Court for an order staying Ontario Hydro's legal action on the grounds that the dispute is required to be submitted to arbitration pursuant to the Denison Contract. At this time, the outcome of the dispute is not determinable, and as such, no provision has been accrued in Ontario Hydro's financial statements with respect to any amounts in dispute.

8. UNAMORTIZED DEFERRED COSTS

millions of dollars	1991	1990
Bruce heavy water plant D	74	111
Wesleyville generating station	4	7
Fuel oil contract	29	58
Coal purchase agreement	34	51
Uranium supply contracts	717	–
	858	227

Unamortized deferred costs are amounts that the Board of Directors, under its rate setting authority, has determined be deferred and amortized for recovery through electricity rates on a straight-line basis over a specified period of years.

As a result of the decision taken in 1991 by Ontario Hydro to amend the Rio Algom Limited and cancel the Denison Mines Limited long-term uranium supply contracts, $592 million was transferred from "Unamortized advances for fuel supplies" (see note 7).

In 1991, $40 million and $46 million (1990: $39 million and $46 million) were charged respectively to depreciation and fuel used for electric generation.

9. LONG-TERM DEBT

millions of dollars	1991	1990
Bonds and notes payable	**32,098**	29,292
Other long-term debt	**62**	86
	32,160	29,378
Less payable within one year	**2,063**	1,677
	30,097	27,701

Bonds and notes payable, expressed in Canadian dollars, are summarized by years of maturity and by the currency in which they are payable in the following table:

	1991				1990	
Years of Maturity	*Principal Outstanding*			*Weighted Average Interest Rate*	*Principal Outstanding*	*Weighted Average Interest Rate*
	Canadian	*Foreign*	*Total*		*Total*	
	millions of dollars			*per cent*	*millions of dollars*	*per cent*
1991	–	–	–		1,653	
1992	**1,139**	**898**	**2,037**		2,021	
1993	**2,799**	**41**	**2,840**		2,800	
1994	**1,323**	**562**	**1,885**		1,927	
1995	**1,836**	**735**	**2,571**		2,697	
1996	**2,461**	**164**	**2,625**		–	
1 - 5 years	**9,558**	**2,400**	**11,958**	**10.8**	11,098	11.0
6 - 10 years	**6,734**	**1,127**	**7,861**	**10.4**	6,531	10.0
11 - 15 years	**1,782**	**370**	**2,152**	**10.8**	3,509	11.2
16 - 20 years	**3,403**	**2,192**	**5,595**	**10.5**	5,281	10.4
21 - 25 years	**648**	**534**	**1,182**	**11.8**	1,873	13.2
26 years and over	**3,350**	–	**3,350**	**10.4**	1,000	10.9
	25,475	**6,623**	**32,098**	**10.6**	29,292	10.8
Currency in which payable:						
Canadian dollars			**25,475**		22,446	
United States dollars			**6,496**		6,846	
Swiss francs			**127**		–	
			32,098		29,292	

9. LONG-TERM DEBT *continued*

Bonds and notes payable are either held, or guaranteed as to principal and interest, by the Province of Ontario.

Bonds and notes payable in United States dollars include $4,292 million (1990: $5,056 million) of Ontario Hydro bonds held by the Province of Ontario and having terms identical with Province of Ontario issues sold in the United States on behalf of Ontario Hydro.

Ontario Hydro has entered into financial arrangements as a vehicle for setting the interest rates in advance of future bond issues. As at December 31, 1991, obligations to sell $717 million of Government of Canada bonds in 1992 were outstanding (1990: nil).

Ontario Hydro has entered into financial arrangements to hedge a portion of the foreign currency exposure related to long-term debt. These arrangements are in forward exchange contracts, foreign currency swap contracts and foreign currency options. Forward exchange contracts amounted to US$2,834 million as at December 31, 1991 (1990: US$1,128 million), having a weighted average Canadian dollar exchange rate of 1.22 (1990: 1.27). These forward exchange contracts hedge principal and interest payments amounting to US$1,567 million due in 1992 and the remaining US$1,267 million hedge principal and interest payments due over the period 1993 through 1998. Foreign currency swap contracts to exchange US$897 million and Swiss franc 261 million of principal and interest payments into Canadian dollars were outstanding as at December 31, 1991 (1990: US$850 million). Of this, US$60 million and Swiss franc 11 million are due in 1992, and US$837 million and Swiss franc 250 million are due over the period 1993 to 2001. Option contracts giving Ontario Hydro the right to buy US$135 million were outstanding as at December 31, 1991 (1990: nil).

Other long-term debt

	Years of Maturity	*Interest Rate*	**1991**	1990
		per cent	*millions of dollars*	*millions of dollars*
Balance due to Atomic Energy of Canada Limited on purchase of Bruce heavy water plant A	1992	7.8	**24**	47
Capitalized lease obligation for the Head Office building, payable in US dollars	2005	8.0	**38**	39
			62	86

Payments required on the above debt, excluding interest, will total $34 million over the next five years. The amount payable within one year is $26 million (1990: $24 million).

10. BANK INDEBTEDNESS

Bank indebtedness includes short-term bank lines of credit available to Ontario Hydro in the amount of $600 million. The lines of credit are unsecured and bear interest at approximately the Canadian prime rate.

11. ACCRUED FIXED ASSET REMOVAL AND IRRADIATED FUEL DISPOSAL COSTS

millions of dollars	1991	1990
Accrued fixed asset removal costs		
– accrued decommissioning costs	**376**	330
– accrued fuel channel removal costs	**347**	278
	723	608
Accrued irradiated fuel disposal costs	**618**	516
	1,341	1,124

Fixed asset removal costs

Fixed asset removal costs are the costs of decommissioning nuclear and fossil generating stations and heavy water production facilities after the end of their service lives, and the costs of removing certain fuel channels which are expected to be replaced during the life of the nuclear reactors. The significant assumptions used in estimating fixed asset removal costs were:

- decommissioning of nuclear generating stations in the 2042 to 2065 period on the deferred dismantlement basis (dismantlement following storage with surveillance for a 30-year period after shutdown of the reactors), and a transportation distance of 1,000 kilometres from nuclear generating facilities to disposal facilities;
- dismantlement of Bruce heavy water plants A, B and D in the 1995 to 2005 period;
- interest rates through to 2065 ranging from 9% to 11% (1990: 9% to 10%);
- escalation rates through to 2065 ranging from 4% to 7% (1990: 4% to 7%); and
- removal of fuel channels in Pickering nuclear generating station A Unit 4 in the 1991 to 1993 (1990: Units 3 and 4 in the 1989 to 1992) period, Bruce nuclear generating station A Units 1 and 2 in the 1993 to 1999 (1990: 1993 to 1999) period and Units 3 and 4 in the 2002 to 2010 (1990: 2002 to 2010) period, Pickering B in the 2012 to 2017 (1990: 2012 to 2017) period, Bruce B in the 2014 to 2019 (1990: 2014 to 2019) period, and Darlington nuclear generating station in the 2019 to 2024 (1990: 2019 to 2024) period.

Because of possible changes to the above factors and the methods used for decommissioning and fuel channel removal, these costs are subject to revision.

Irradiated fuel disposal costs

The significant assumptions used in estimating the future irradiated fuel disposal costs were:

- an in-service date of the year 2025 (1990: 2025) for irradiated nuclear fuel disposal facilities;
- a transportation distance of 1,000 kilometres from nuclear generating facilities to disposal facilities;
- interest rates through to the disposal date ranging from 9% to 11% (1990: 9% to 10%); and
- escalation rates through to the disposal date ranging from 4% to 7% (1990: 4% to 7%).

Because of the uncertainties associated with the technology of disposal, and the above factors, these costs are subject to change.

12. STATEMENT OF SOURCE OF CASH USED FOR INVESTMENT IN FIXED ASSETS

The statement of source of cash used for investment in fixed assets reports the investment in fixed assets resulting from the cash flows from operating and financing activities and the effects of changes in accounts payable and accrued charges affecting investment in fixed assets during the year. This statement focuses on cash used for investment in fixed assets in view of Ontario Hydro's current level of construction activities which are financed from the two sources, cash provided from operations and cash provided from financing. Cash provided from financing represents the amount of cash provided from the issuance of long-term debt, less the amount of cash used to retire long-term debt, and the effects of changes in cash and cash equivalents, defined to be cash and short-term investments less bank indebtedness and short-term notes payable.

The components of cash provided from operations and the reconciliation of investment in fixed assets to cash used for investment in fixed assets are summarized below:

millions of dollars	1991	1990
Cash provided from operations		
Net Income	**204**	129
Items not requiring cash in the current year		
Depreciation	**1,136**	908
Amortization of foreign exchange gains and losses	**(22)**	(48)
Provision for irradiated fuel disposal costs	**45**	35
Other	**42**	121
	1,405	1,145
Changes in non-cash working capital and long-term accounts payable affecting operations – (increase)	**(24)**	(391)
Cash provided from operations	**1,381**	754
Investment in fixed assets		
The reconciliation of the change in fixed assets during the year with the investment in fixed assets and cash used for investment in fixed assets for the year:		
Change in fixed assets	**3,031**	2,777
Depreciation of fixed assets in service	**991**	858
Less depreciation charged to heavy water production and construction in progress	**(119)**	(108)
	872	750
Net book value of fixed assets sold or retired	**31**	17
Investment in fixed assets	**3,934**	3,544
Changes in accounts payable and accrued charges affecting investment in fixed assets – (increase) decrease	**(578)**	48
Cash used for investment in fixed assets	**3,356**	3,592

13. PENSION, INSURANCE AND HEALTH CARE

Ontario Hydro's employee benefit programs include the pension plan, the group life insurance plan and the long-term disability plan. The assets of these plans and the changes in assets during the year are shown in the financial statements of The Pension and Insurance Fund and are not included in Ontario Hydro's financial statements.

Pension Plan

In June 1991, Ontario Hydro and the Ontario Hydro Employees' Union, Local 1000 of the Canadian Union of Public Employees—C.L.C. (the Union) reached a settlement regarding the monetary claims related to the Corporation's contributions for the years 1965, 1980 to 1985 and 1987 to 1989. Pursuant to the terms of the settlement, Ontario Hydro agreed to pay into the Pension Plan an additional $228 million, plus interest at the pension fund rate of return on this amount from January 1, 1991 to the payment date. The Society of Ontario Hydro Professional and Administrative Employees agreed with the terms of the settlement. Court approval, which ensures that the settlement is binding upon all current and former Pension Plan members and their beneficiaries, was obtained in November 1991. Ontario Hydro has since paid the $228 million plus interest into the Pension Plan. The amount paid was charged to the "Deferred pension cost" account in the statement of financial position and the balance in this account represents the cumulative difference between the annual funding contributions and the annual pension costs. Ontario Hydro and the Union also agreed to proceed to court with the remaining issues pertaining to the governance of the Pension Plan.

The pension costs for 1991 were $143 million (1990: $165 million). In 1991, about $94 million (1990: $124 million) of the pension costs were charged to operations and $49 million (1990: $41 million) were capitalized.

The pension costs for 1991 were actuarially determined for accounting purposes using the following significant assumptions which take into consideration the long-term nature of the pension plan:

- rate used to discount future pension benefits – 8.75% (1990: 8.50%);
- rate used to estimate interest cost – 8.75% (1990: 8.50%);
- rate used to estimate return on investments – 9.75% (1990: 8.50%)
- salary schedule escalation rate – 5.75% (1990: 5.75%);
- rate used to estimate improvements in pension benefits to partially offset the effect of increase in cost of living – 3.75% (1990: 3.75%); and
- average remaining period of service of the employees – 16 years (1990: 16 years).

Based on these assumptions, the actuarial present value of the accrued pension benefits is estimated to be $5,430 million as at December 31, 1991 (1990: $4,756 million), and the pension plan assets available for these benefits were $5,227 million (1990: $4,489 million) based on a five-year market value average.

13. PENSION, INSURANCE AND HEALTH CARE *continued*

Group life insurance plan

The group life insurance plan had assets of $4 million as at December 31, 1991 (December 31, 1990: $13 million). Effective April 1, 1986, the assets are being used to pay both the employee and employer insurance premiums for all members of the plan until such time as the assets are fully utilized.

Group health care plan

Ontario Hydro provides a group health care plan to its employees. In 1991, the cost of providing these benefits was $42 million (1990: $37 million).

Other post-employment benefits

In addition to pension benefits, Ontario Hydro provides group life insurance and health care benefits to its retired employees and, in certain cases, their surviving spouses and unmarried dependents. The cost of providing the group life insurance and health care benefits is charged to operations as the benefits are incurred. In 1991, the cost of providing these benefits was $14 million (1990: $12 million).

14. RESEARCH AND DEVELOPMENT

In 1991 approximately $145 million of research and development costs were charged to operations and $20 million were capitalized (1990: $148 million and $16 million, respectively).

FIVE-YEAR SUMMARY OF FINANCIAL AND OPERATING STATISTICS

	1991	1990	1989	1988	1987
millions of dollars					
Revenues					
Primary power and energy					
Municipal utilities	**4,873**	4,373	4,209	3,824	3,441
Rural retail customers	**1,397**	1,297	1,256	1,103	968
Direct industrial customers	**811**	792	790	730	675
	7,081	6,462	6,255	5,657	5,084
Secondary power and energy	**62**	22	91	156	196
	7,143	6,484	6,346	5,813	5,280
Costs					
Operation, maintenance and administration	**2,037**	1,927	1,534	1,354	1,150
Fuel and fuel-related	**1,273**	1,497	1,363	1,190	1,223
Provincial government levies	**252**	235	177	91	85
Depreciation	**1,136**	908	845	811	723
	4,698	4,567	3,919	3,446	3,181
Income before financing charges	**2,445**	1,917	2,427	2,367	2,099
Financing charges					
Gross interest	**3,583**	3,204	3,016	2,845	2,744
Capitalized interest	**(1,193)**	(1,318)	(1,175)	(1,012)	(978)
Investment income	**(156)**	(83)	(144)	(93)	(64)
Foreign exchange	**7**	(15)	31	1	126
	2,241	1,788	1,728	1,741	1,828
Net income	**204**	129	699	626	271
Financial position					
Total assets	**43,244**	39,373	36,277	34,358	32,657
Fixed assets	**38,170**	35,139	32,362	29,975	27,986
Long-term debt	**30,097**	27,701	25,141	24,240	23,862
Equity	**6,619**	6,416	6,287	5,588	4,962
Cash flows					
Cash provided from operations	**1,381**	754	1,705	1,368	1,204
Cash provided from financing	**2,748**	2,889	1,330	1,350	1,397
Cash used for investment in fixed assets	**3,356**	3,592	2,992	2,673	2,452
Investment in fixed assets	**3,934**	3,544	3,095	2,689	2,524
Financial indicators					
Interest coverage[1]	**1.06**	1.04	1.24	1.23	1.10
Debt ratio[2]	**0.838**	0.829	0.817	0.829	0.836
millions of kilowatt-hours					
Primary energy sales[3]					
Municipal utilities	**93,623**	92,116	93,715	89,607	84,058
Rural retail customers	**18,988**	19,444	19,767	18,365	16,599
Direct industrial customers	**18,353**	19,315	20,491	20,096	19,561
	130,964	130,875	133,973	128,068	120,218
Secondary energy sales[3]	**2,123**	577	2,292	5,019	6,515
Energy and Demand					
Installed dependable peak capacity *megawatts*[4]	**32,333**	31,350	30,271	30,333	30,080
December primary peak demand *megawatts*	**22,933**	21,785	23,630	23,012	20,524
Primary energy made available *millions of kilowatt-hours*[5]	**136,966**	136,744	140,770	134,395	126,455

	1991	1990	1989	1988	1987
Number of primary customers[3]					
Municipal utilities	**311**	314	315	316	316
Rural retail customers	**925,397**	918,568	894,485	863,049	835,937
Direct industrial customers	**118**	119	116	107	108
in cents per kilowatt-hour of total energy sales					
Average revenue[3]					
Primary power and energy					
Municipal utilities	**5.205**	4.747	4.491	4.268	4.094
Rural retail customers	**7.883**	7.352	6.801	6.361	6.248
Direct industrial customers	**4.419**	4.100	3.855	3.633	3.451
All primary customers combined	**5.419**	5.024	4.715	4.453	4.268
Secondary power and energy	**2.920**	3.813	3.970	3.108	3.008
All classifications combined	**5.419**	5.001	4.702	4.402	4.203
expressed as a per cent					
Average rate increases					
Municipal utilities	**8.7**	6.1	5.0	4.7	5.2
Rural retail customers	**8.7**	5.3	5.9	4.4	6.6
Direct industrial customers	**7.8**	5.6	6.0	5.2	5.6
All primary customers combined	**8.6**	5.9	5.3	4.7	5.5
in cents per kilowatt-hour of energy generated					
Average cost[3,6]					
Hydroelectric					
Operation, maintenance and administration	**.299**	.271	.275	.270	.276
Water rentals	**.338**	.303	.287	.274	.285
Depreciation, debt guarantee fee and financing charges	**.424**	.373	.389	.386	.465
	1.061	.947	.951	.930	1.026
Nuclear					
Operation, maintenance and administration	**1.033**	1.100	.739	.623	.508
Uranium	**.502**	.490	.458	.453	.481
Depreciation, debt guarantee fee and financing charges	**2.756**	2.631	2.241	2.078	2.193
	4.291	4.221	3.438	3.154	3.182
Fossil					
Operation, maintenance and administration	**.839**	.899	.600	.530	.488
Coal, gas and oil	**2.388**	2.479	2.217	2.258	2.600
Depreciation, debt guarantee fee and financing charges	**1.489**	1.274	.931	.918	.933
	4.716	4.652	3.748	3.706	4.021
Average number of employees					
Regular	**28,396**	26,821	25,147	24,543	24,066
Non-regular[7]	**7,309**	9,653	8,929	7,930	8,081

1 Interest coverage represents net income plus interest on bonds, notes, and other debt divided by interest on bonds, notes and other debt.

2 Debt ratio represents debt (bonds and notes payable, short-term notes payable, other long-term debt, accrued fixed asset removal and irradiated fuel disposal costs and bank indebtedness less unamortized foreign exchange gains and losses) divided by debt plus equity.

3 Figures for 1991 are preliminary.

4 Installed dependable peak capacity represents the net output power supplied by all generating units, and includes non-operating reserve facilities: 1991: 1,551 megawatts; 1990: 1,551 megawatts; 1989: 2,109 megawatts; 1988: 2,109 megawatts; and 1987: 2,667 megawatts. Also included are net firm power purchase contracts.

5 Primary energy made available represents primary energy sales plus transmission losses and energy used for heavy water production and generation projects.

6 Average cost per kilowatt-hour represents the costs attributable to generation but excludes the costs related to transmission, distribution and corporate administrative activities. These figures reflect the historical accounting costs of operating facilities and the actual energy generated by these facilities during the year.

7 The majority of non-regular staff are construction trades persons.

FIVE-YEAR SUMMARY OF STATISTICS
CUSTOMERS SERVED BY ONTARIO HYDRO AND ASSOCIATED MUNICIPAL UTILITIES

	1991[1]	1990	1989	1988	1987
in thousands					
Total number of customers					
Residential	**3,170**	3,129	3,064	2,958	2,868
Farm	**105**	105	105	106	106
Commercial and industrial	**421**	420	408	392	377
	3,696	3,654	3,577	3,456	3,351
in kilowatt-hours per customer					
Average annual use					
Residential	**11,500**	11,668	11,856	11,588	11,019
Farm	**23,944**	23,945	24,762	24,795	23,547
Commercial and industrial	**207,000**	212,193	225,103	224,705	220,834
in cents per kilowatt-hour					
Average revenue[2]					
Residential	**7.24**	6.68	6.25	5.99	5.73
Farm	**7.34**	6.80	6.44	6.14	5.89
Commercial and industrial	**5.68**	5.22	4.88	4.62	4.40
All customers	**6.12**	5.67	5.29	5.03	4.79

1 Figures for 1991 are preliminary.
2 Includes rural rate assistance.

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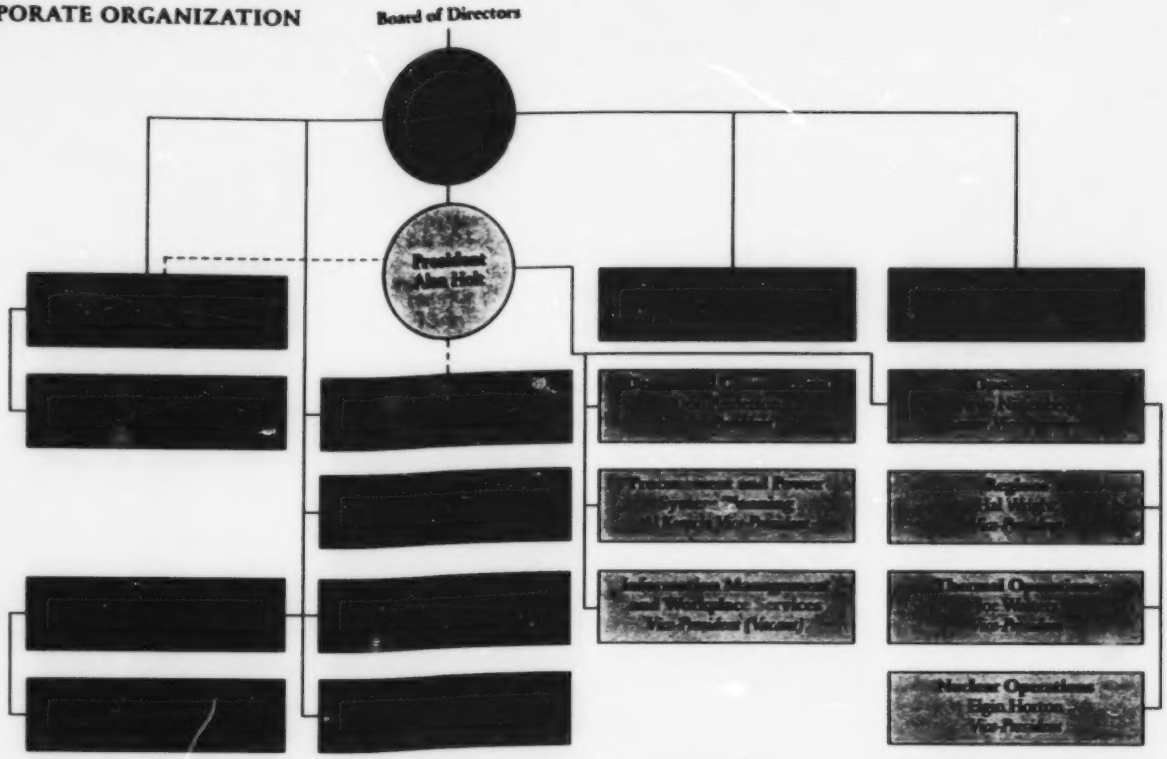

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